



# Community Profile Report

## December 27 2021

The Community Profile Report (CPR) is generated by the Data Strategy and Execution Workgroup, under the White House COVID-19 Team. It is managed by an interagency team with representatives from multiple agencies and offices (including the United States Department of Health and Human Services, the Centers for Disease Control and Prevention, the Assistant Secretary for Preparedness and Response, and the Indian Health Service). The CPR provides easily interpretable information on key indicators for all regions, states, core-based statistical areas (CBSAs), and counties across the United States. It is a daily snapshot in time that:

- Focuses on recent COVID-19 outcomes in the last seven days and changes relative to the week prior
- Provides additional contextual information at the county, CBSA, state and regional levels
- Supports rapid visual interpretation of results with color thresholds

Data in this report may differ from data on state and local websites. This may be due to differences in how data were reported (e.g., date specimen obtained, or date reported for cases) or how the metrics are calculated. Historical data may be updated over time due to delayed reporting. Data presented here use standard metrics across all geographic levels in the United States. It facilitates the understanding of COVID-19 pandemic trends across the United States by using standardized data. The footnotes describe each data source and the methods used for calculating the metrics. For additional data for any particular locality, visit the relevant health department website. Additional data and features are forthcoming.

**White House COVID-19 Team, Data Strategy and Execution Workgroup**

All inquiries and requests for information to DSEW should be directed to <https://wwwn.cdc.gov/dcs/ContactUs/Form>.

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# COMMUNITY PROFILE REPORT

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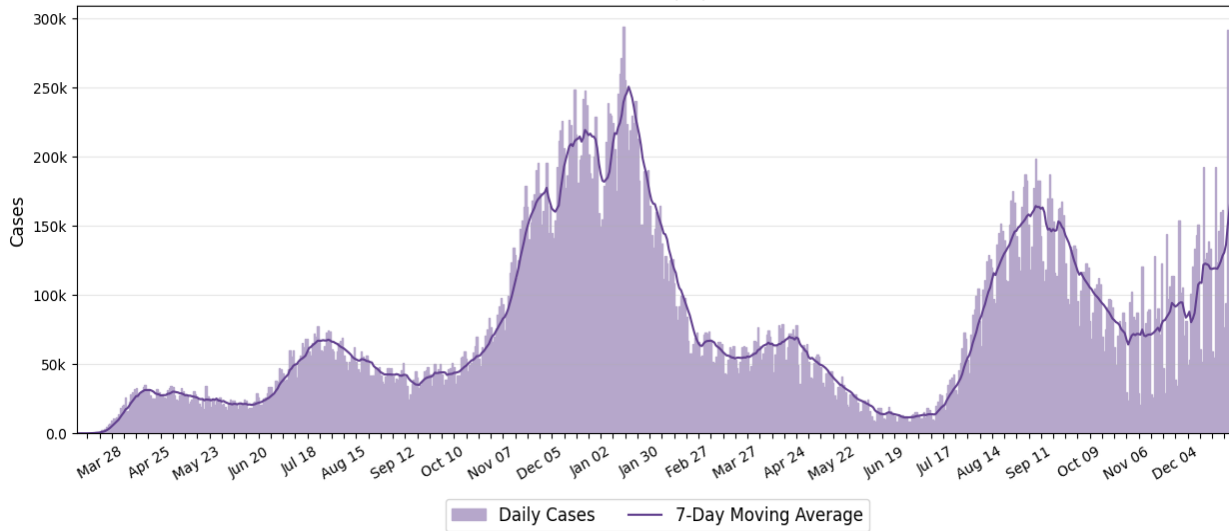
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# NATIONAL TIME SERIES

## New Cases

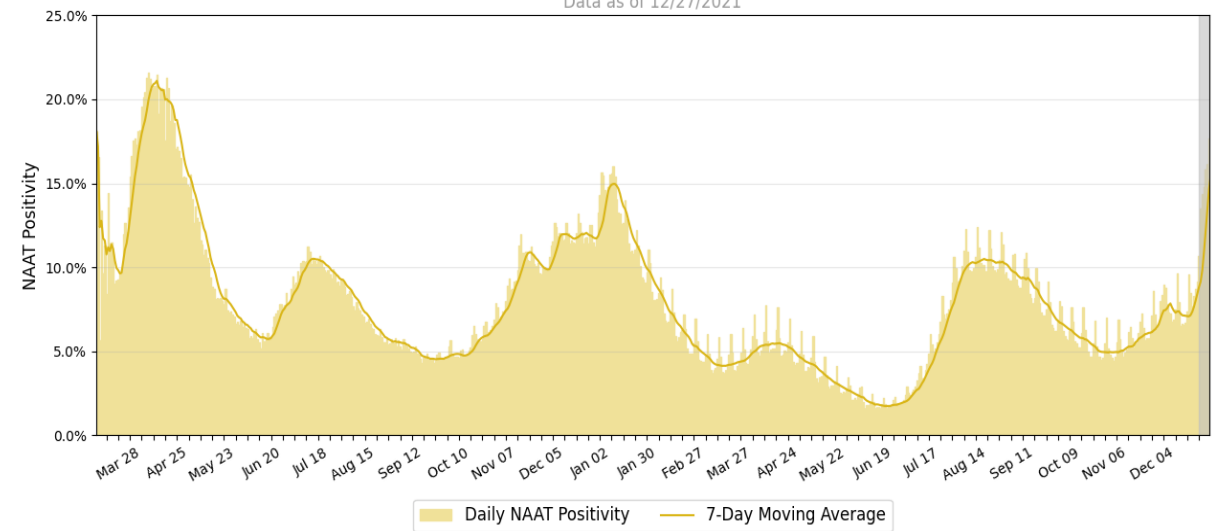
Data as of 12/27/2021



## NAAT Positivity

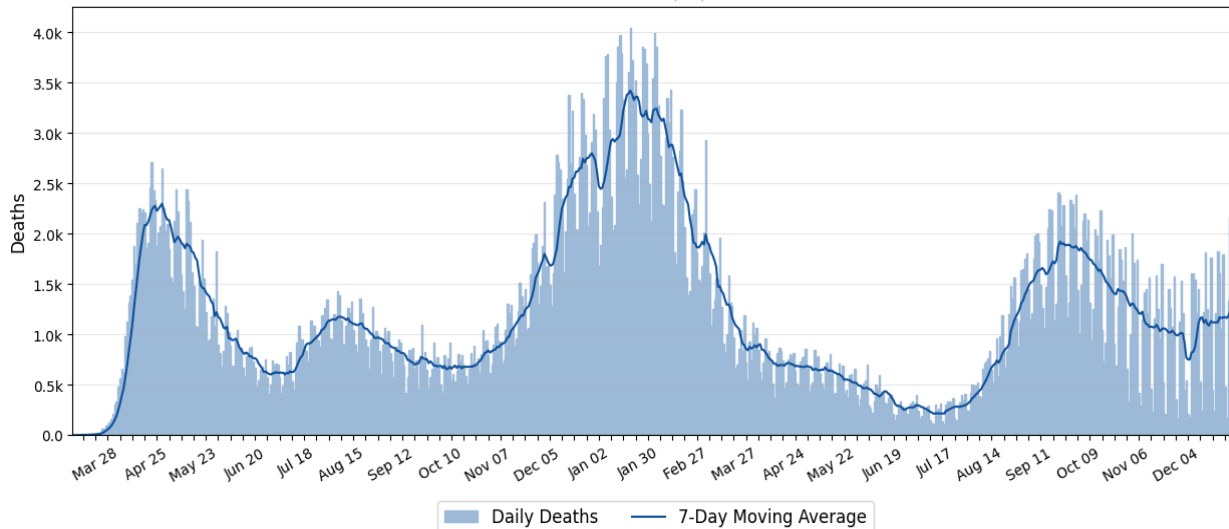
Data as of 12/27/2021

Incomplete Reporting



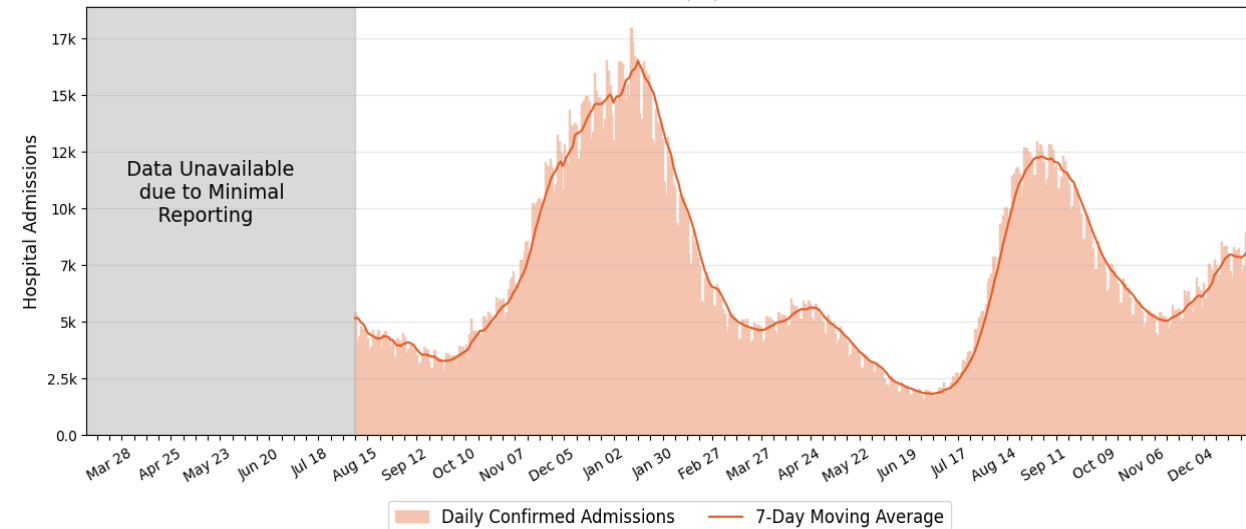
## New Deaths

Data as of 12/27/2021



## New Hospital Admissions

Data as of 12/27/2021



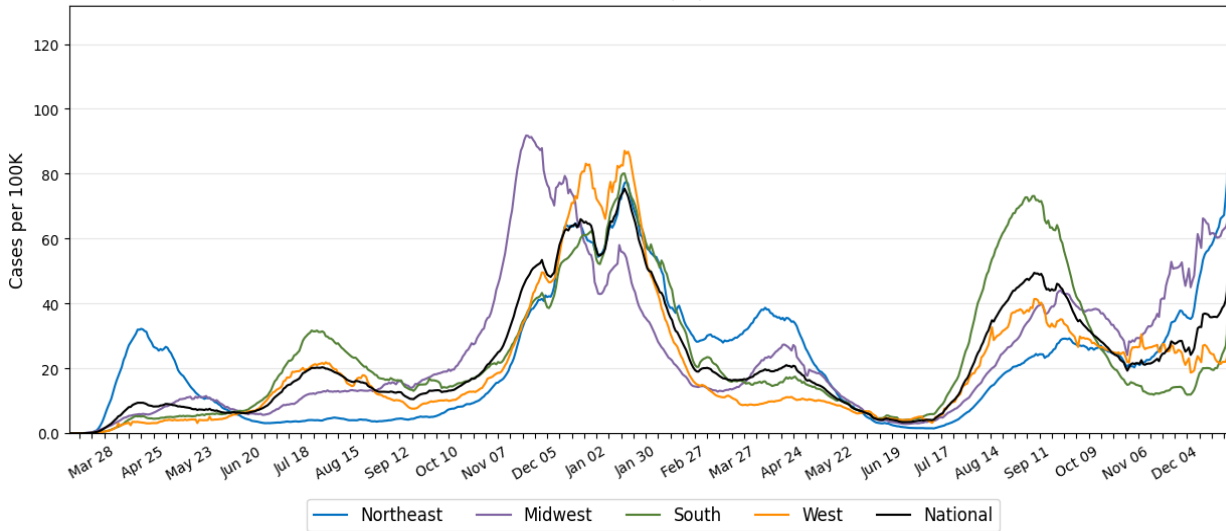
Source: CDC state-reported data (cases and deaths), Unified Testing Dataset, Unified Hospital Dataset.

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# TIME SERIES BY CENSUS REGION

**New Cases per 100K (7-day average)**

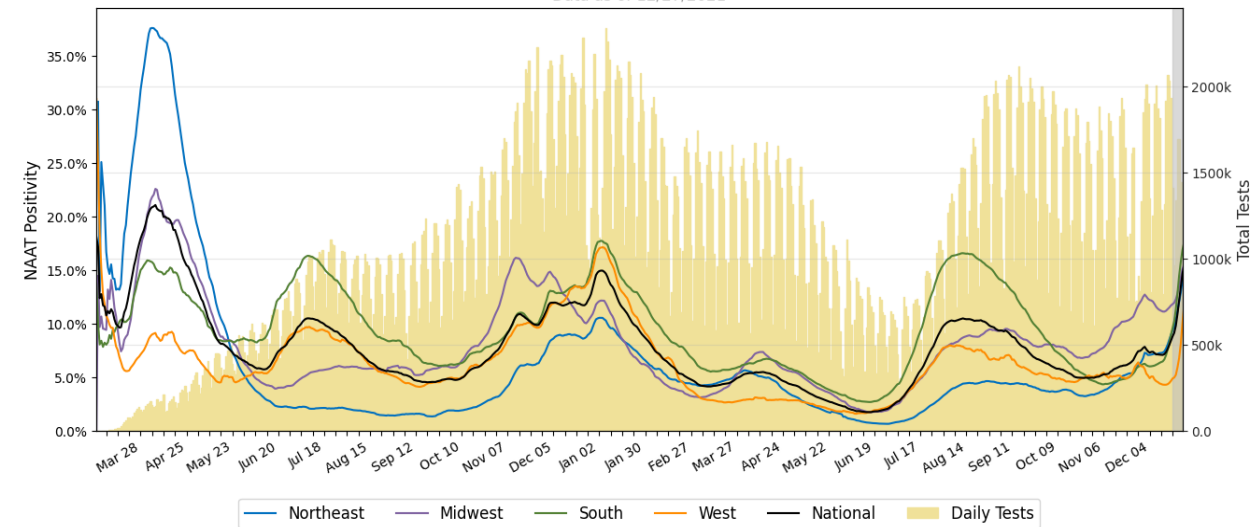
Data as of 12/27/2021



**NAAT Positivity (7-day average)**

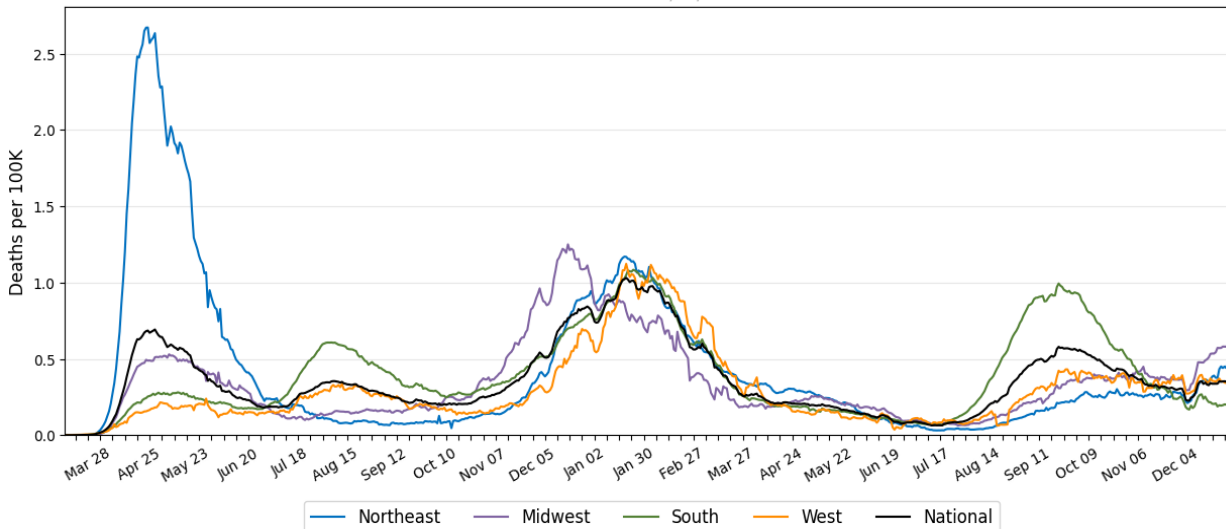
Data as of 12/27/2021

Incomplete Reporting



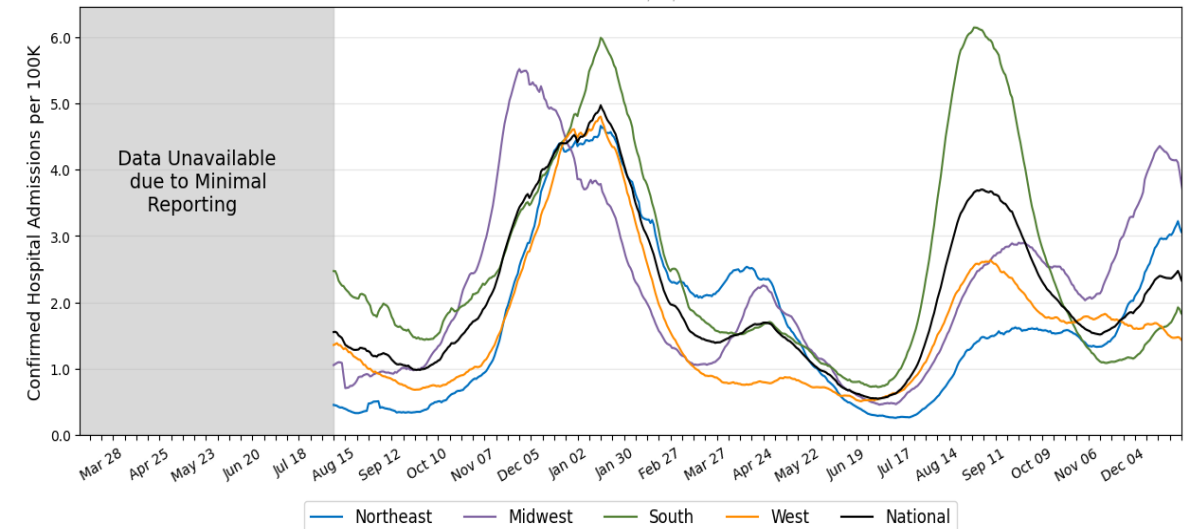
**New Deaths per 100K (7-day average)**

Data as of 12/27/2021



**New Confirmed Hospital Admissions per 100K (7-day average)**

Data as of 12/27/2021



**Source:** CDC state-reported data (cases and deaths), Unified Testing Dataset, Unified Hospital Dataset.

See <https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-regions-and-divisions-of-the-united-states.html> for census regions.

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# NUMBER OF NEW CASES AND DEATHS IN THE LAST 7 DAYS

**Total Cumulative Cases: 52,280,337**

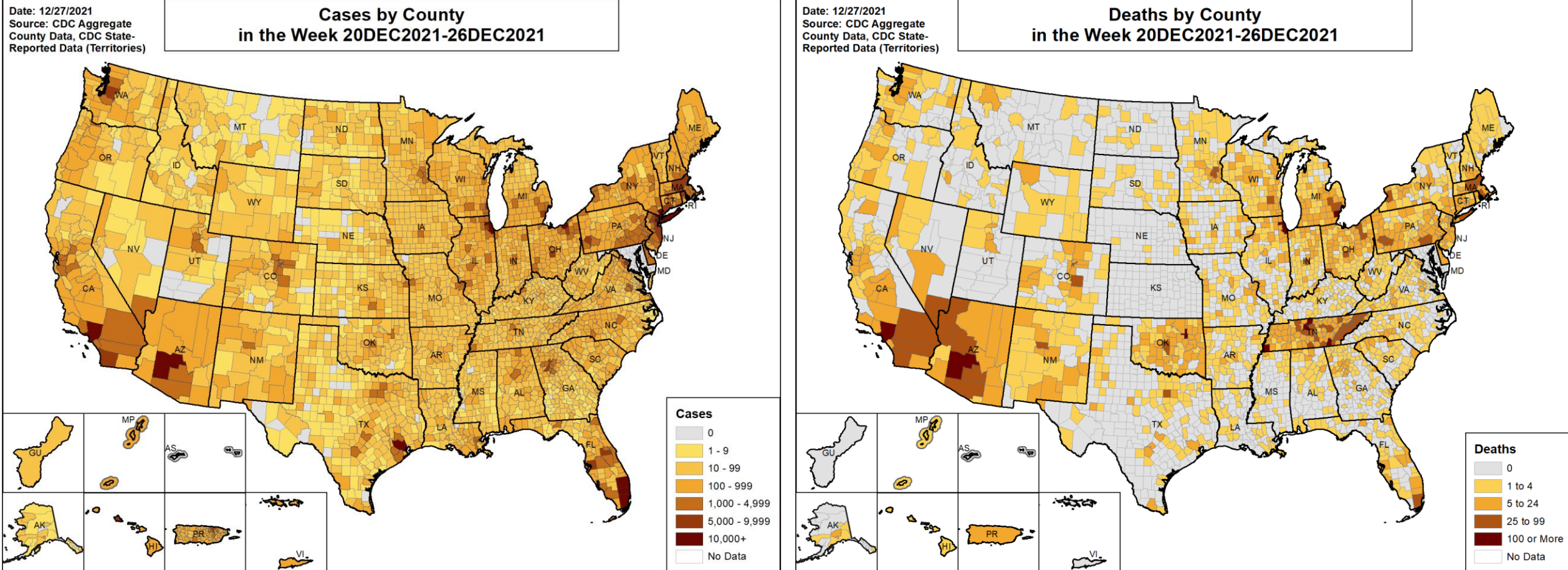
**New Cases in Last 7 Days: 1,446,042**

**Percent Change from Previous 7 Days: +51.4%**

**Total Cumulative Deaths: 813,792**

**New Deaths in Last 7 Days: 7,291**

**Percent Change from Previous 7 Days: -10.6%**

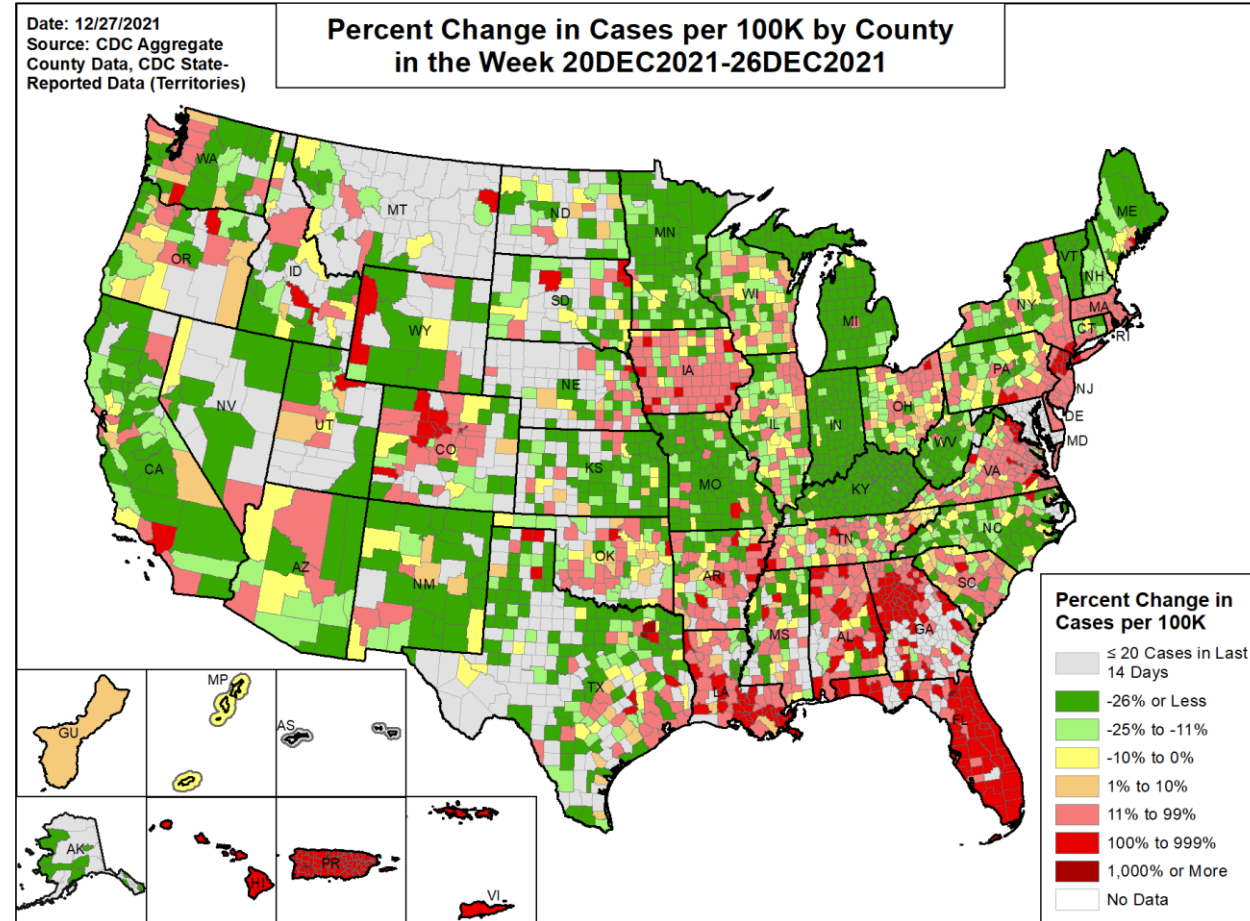
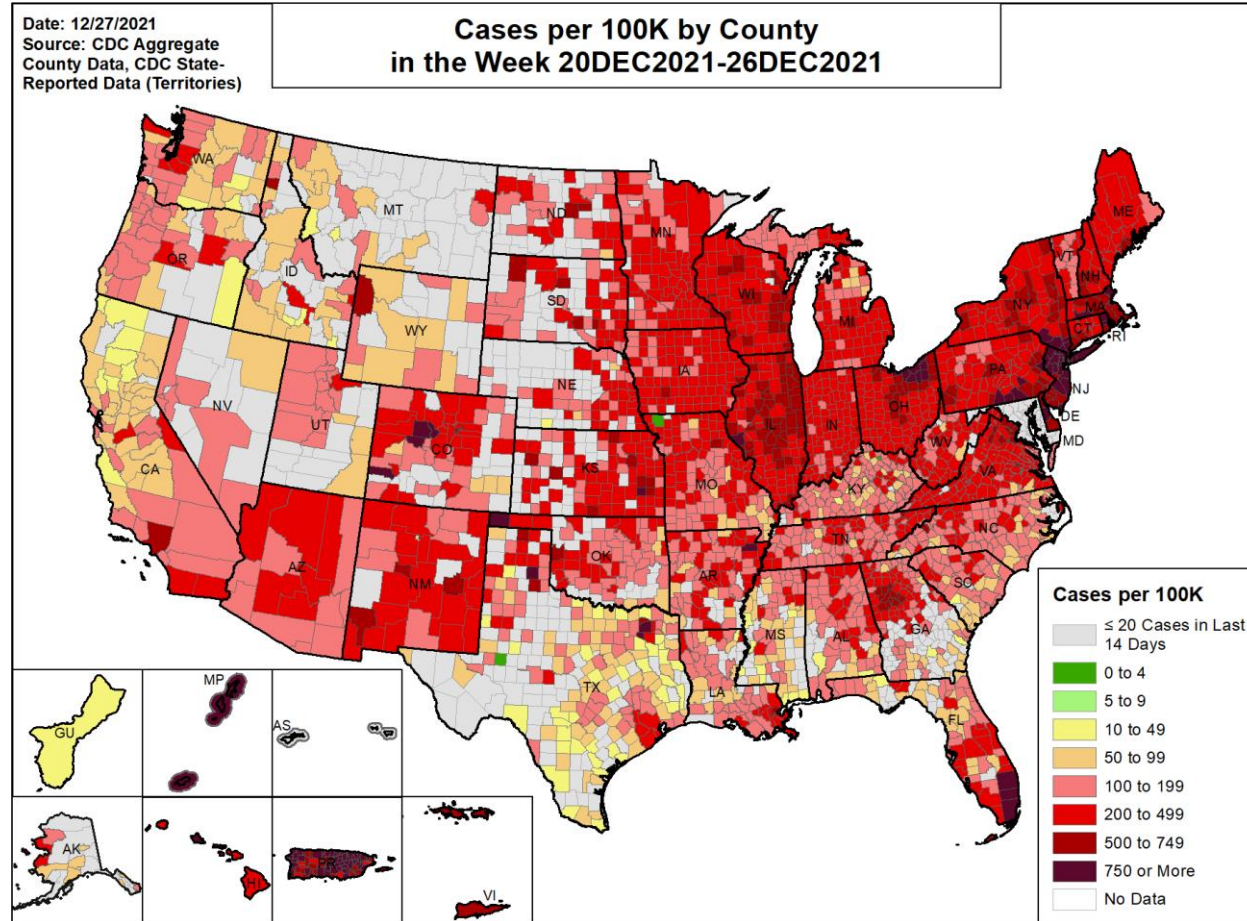


On 12/27/2021, TN and OK county data include many historical deaths that occurred in earlier weeks/months  
KS deaths data has at least 7 days with no reporting in the last week (by the data cutoff time for this report), which may result in missing values and inaccurate death statistics.  
Due to a cyber attack still under investigation, Maryland has not updated county-level cases or deaths data since 12/05/2021.

# CASE INCIDENCE IN LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

Incidence Rate in the Last 7 Days: 435.5 per 100,000

Percent Change from Previous 7 Days: +51.4%



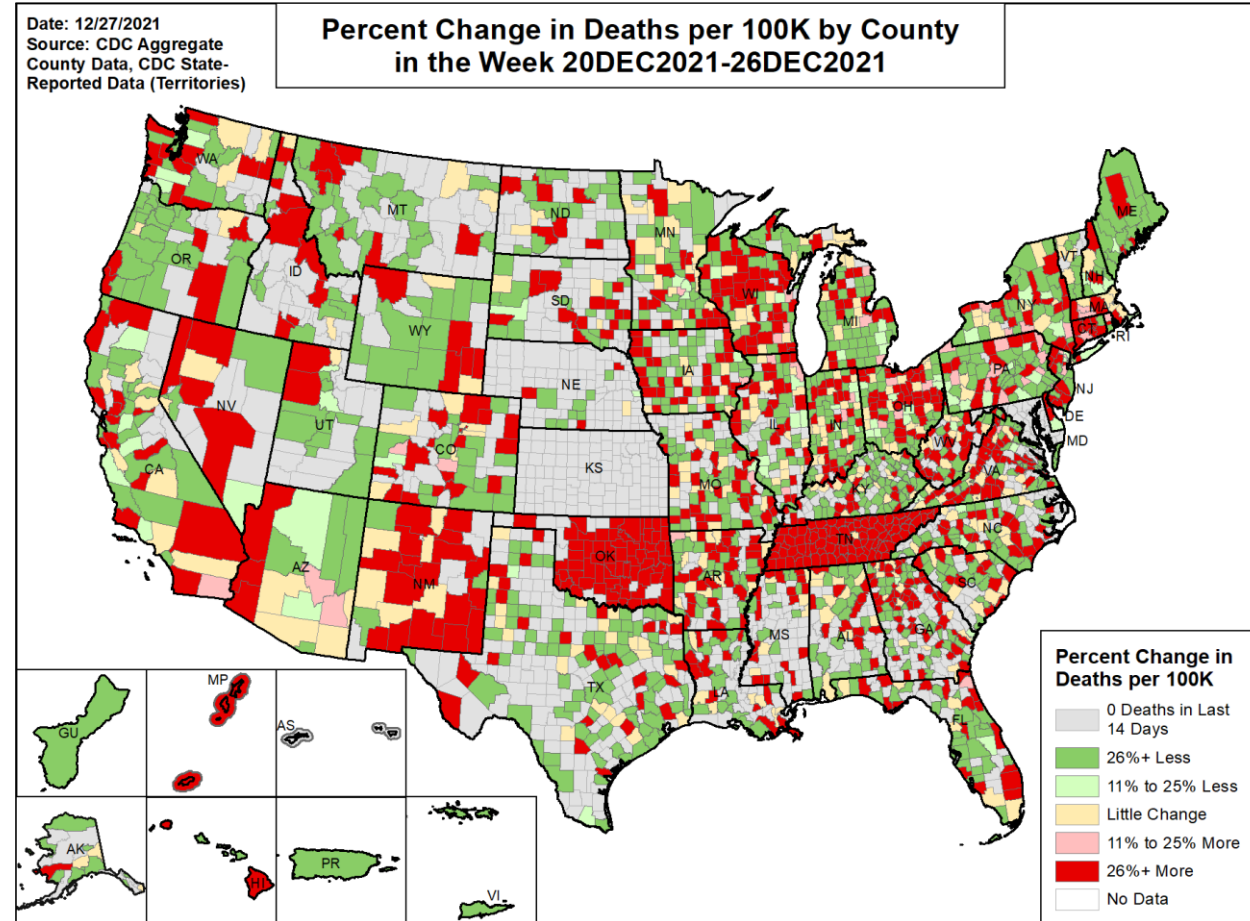
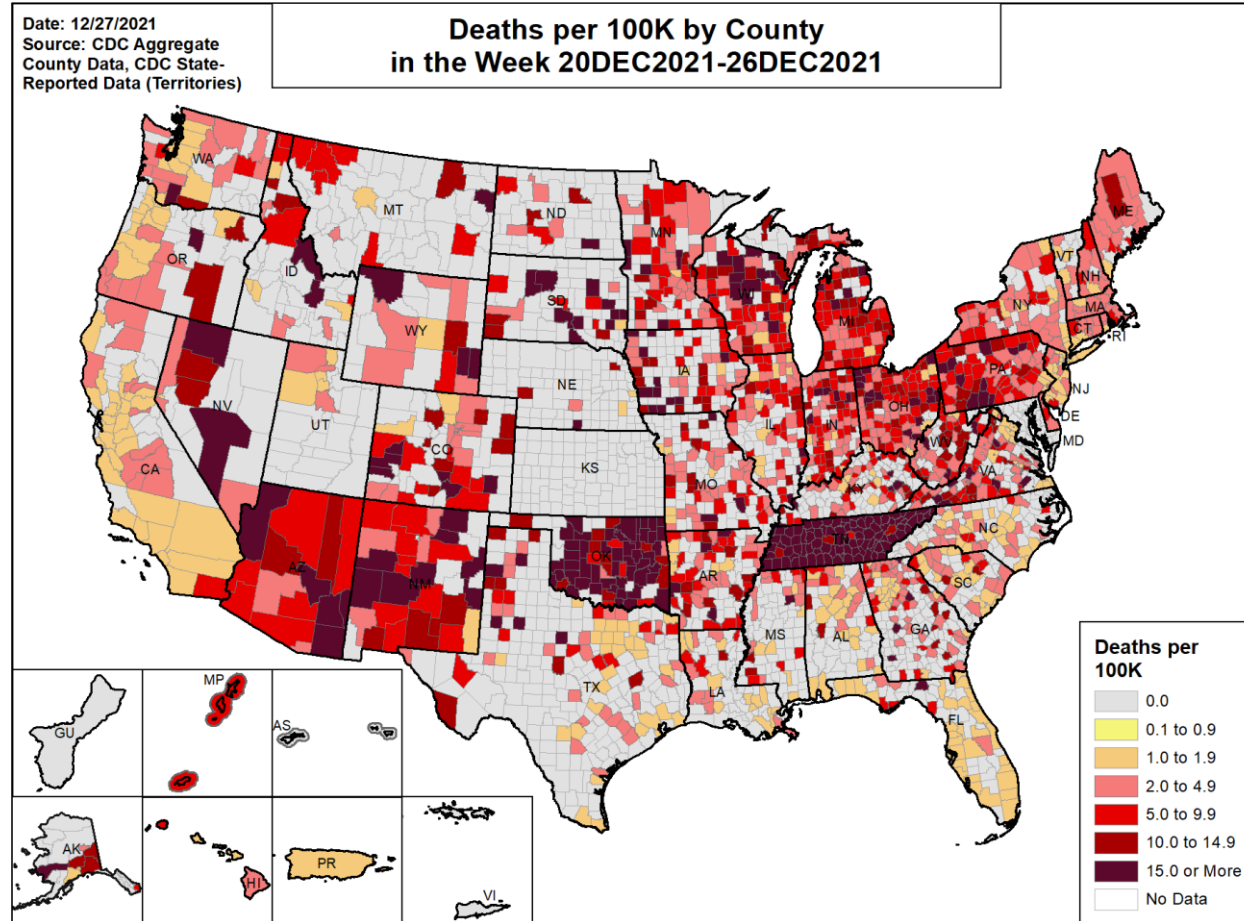
Due to a cyber attack still under investigation, Maryland has not updated county-level cases or deaths data since 12/05/2021.



# MORTALITY RATE IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

**Mortality Rate in the Last 7 Days: 2.2 deaths per 100,000**

**Percent Change from Previous 7 Days: -10.6%**



On 12/27/2021, TN and OK county data include many historical deaths that occurred in earlier weeks/months

KS deaths data has at least 7 days with no reporting in the last week (by the data cutoff time for this report), which may result in missing values and inaccurate death statistics.

Due to a cyber attack still under investigation, Maryland has not updated county-level cases or deaths data since 12/05/2021.

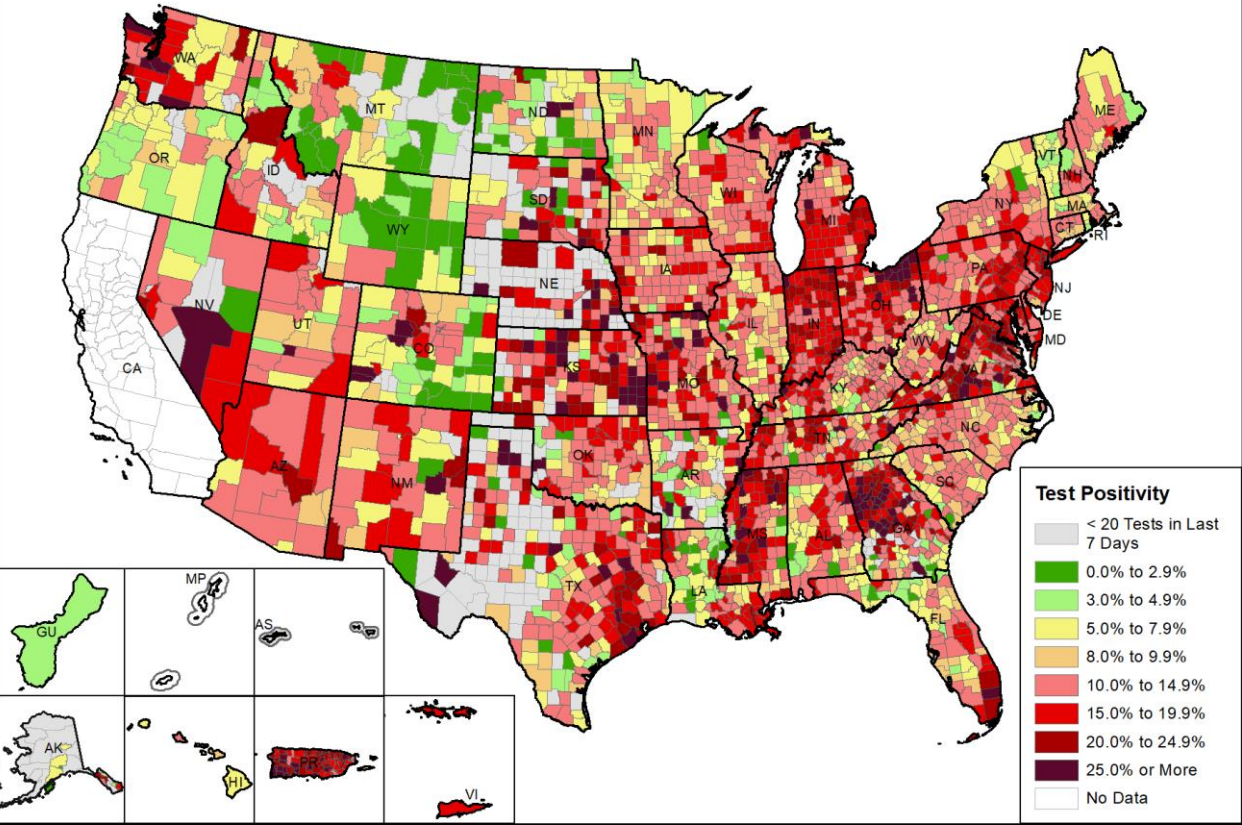
# NAAT POSITIVITY IN THE LAST 7 DAYS AND COMPARISON TO PREVIOUS 7 DAYS

NAAT Positivity in Last 7 Days: 14.7%

Absolute Change from Previous 7 Days: +6.2%

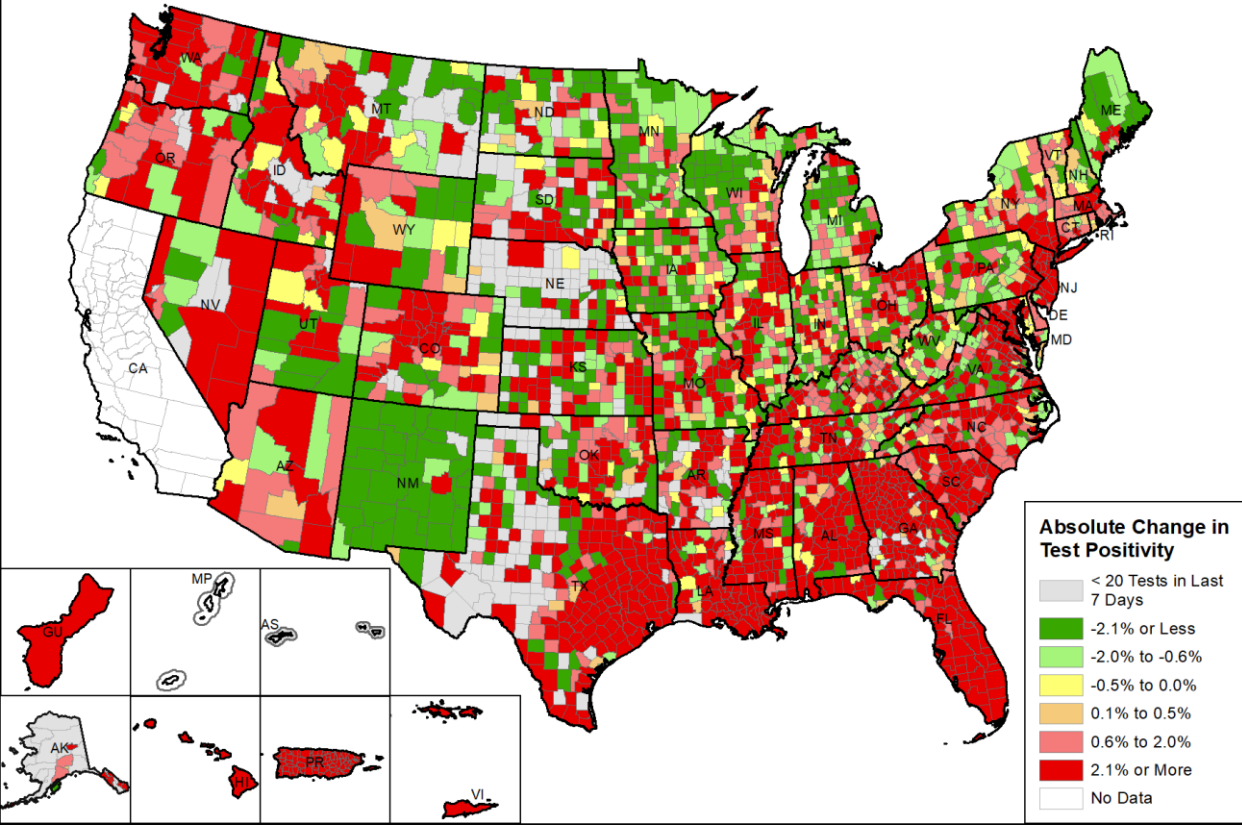
Date: 12/27/2021  
Source: Unified Testing  
Dataset

NAAT Positivity by County  
in the Week 18DEC2021-24DEC2021



Date: 12/27/2021  
Source: Unified Testing  
Dataset

Absolute Change in NAAT Positivity  
by County in the Week 18DEC2021-24DEC2021



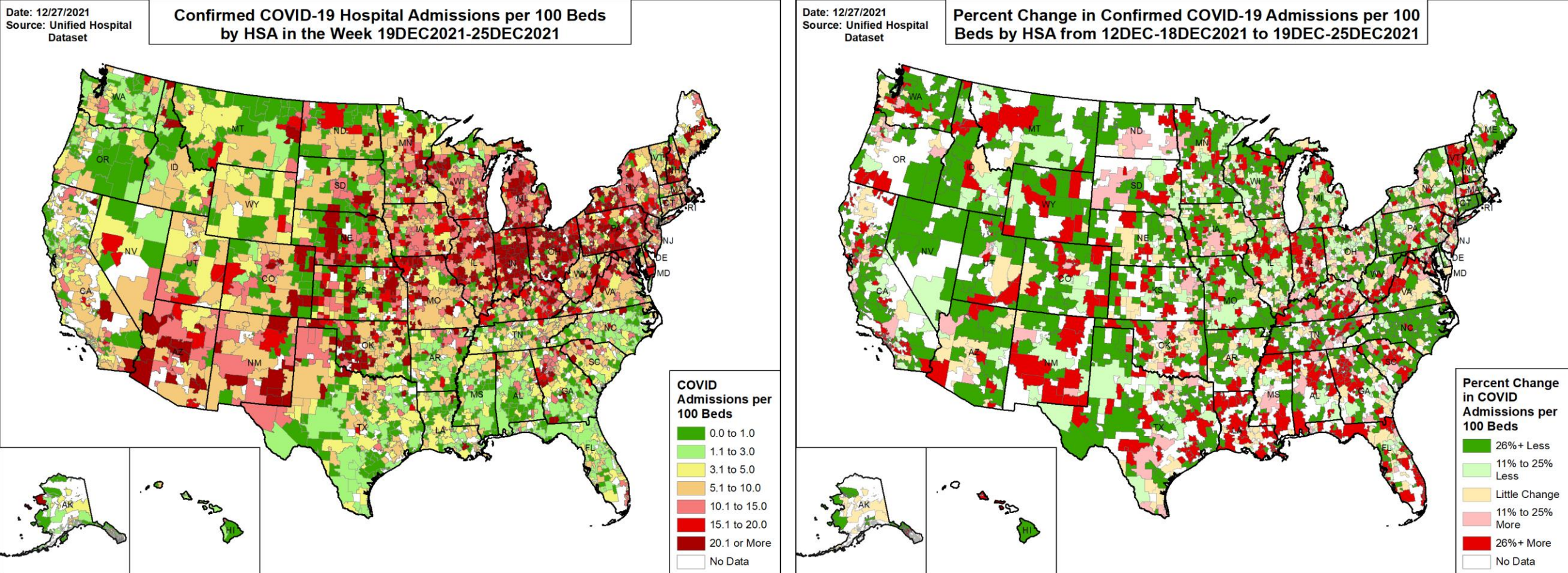
CA testing data has at least 4 days with no or minimal reporting in the last week (by the data cutoff time for this report), which may result in missing values and inaccurate test positivity.



# HOSPITAL ADMISSIONS IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

**Total Confirmed COVID-19 Hospital Admissions in Last 7 Days:**  
54,404

**Percent Change from Previous 7 Days: -1.0%**



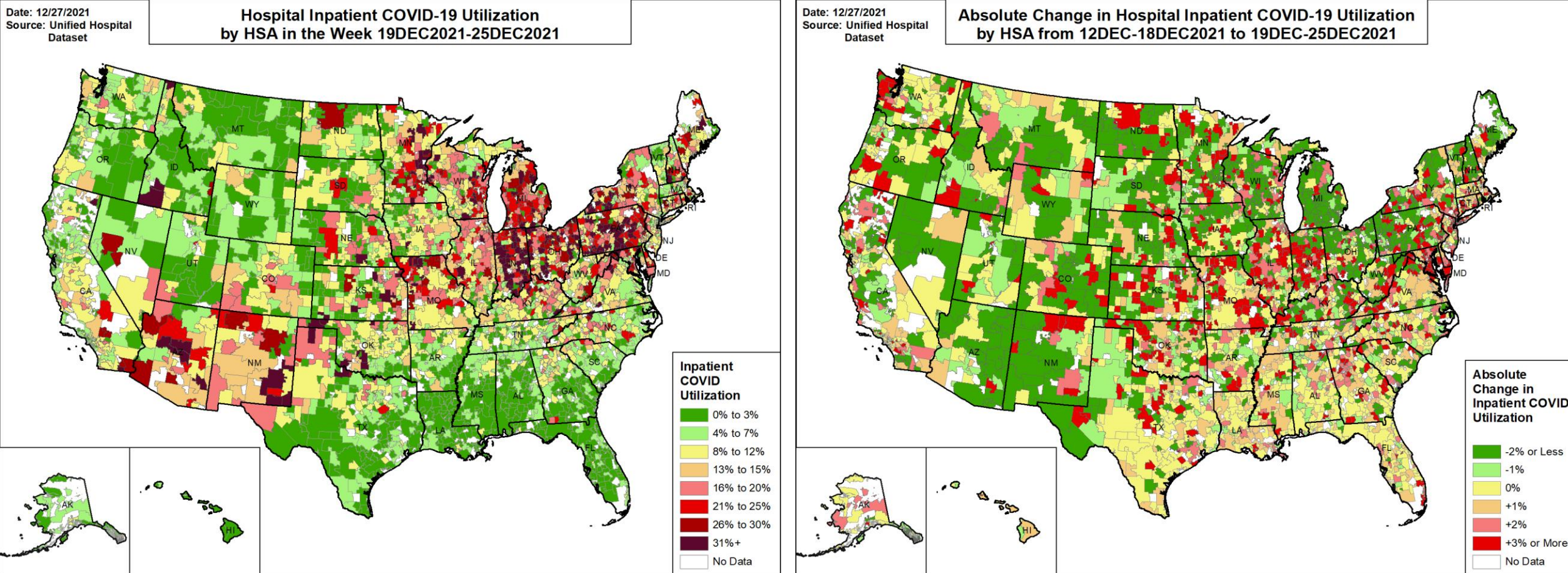
**Source:** Unified Hospital Dataset, excluding psychiatric, rehabilitation, and religious non-medical hospitals. Confirmed COVID-19 admissions are all confirmed daily admissions reported within the last 7 days. Denominator of per 100 beds calculation is the sum of average staffed inpatient bed count reported by hospitals within the geographic region and time period. HSA indicates Hospital Service Area. Hospitals are assigned to HSA based on zip code where known. In some areas, reports are aggregates of multiple facilities that cross HSA boundaries; in these cases, values are assigned based on the zip code for the aggregate.



# HOSPITAL INPATIENT COVID-19 UTILIZATION IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

**Average Daily COVID-19 Hospital Inpatients over Last 7 Days:**  
63,210

**Percent Change from Previous 7 Days: +2.3%**



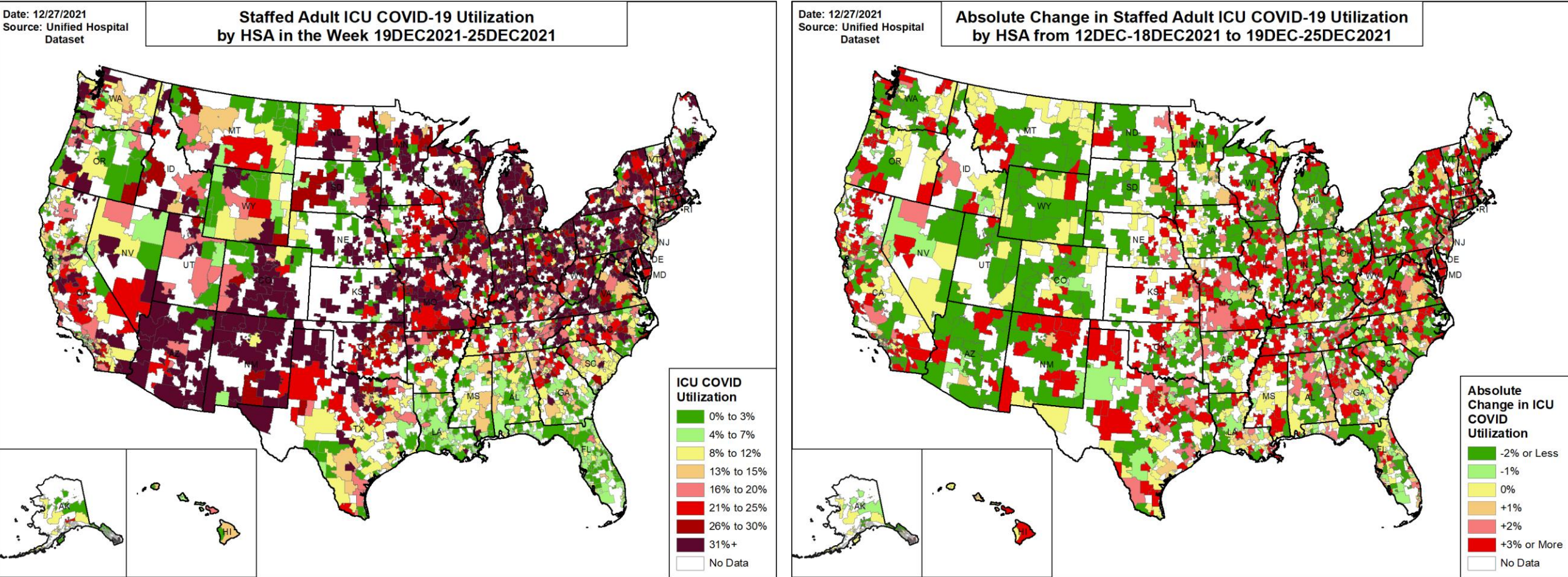
**Source:** Unified Hospital Dataset, excluding psychiatric, rehabilitation, and religious non-medical hospitals. COVID-19 inpatient utilization indicates average percentage of staffed inpatient beds occupied by confirmed COVID-19 patients within the given time period. HSA indicates Hospital Service Area. Hospitals are assigned to HSA based on zip code where known. In some areas, reports are aggregates of multiple facilities that cross HSA boundaries; in these cases, values are assigned based on the zip code for the aggregate. See Data Sources/Methods slides for additional details.



# STAFFED ADULT ICU COVID-19 UTILIZATION IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

Average Daily Adult ICU COVID-19 Patients over Last 7 Days:  
15,978

Percent Change from Previous 7 Days: +1.6%



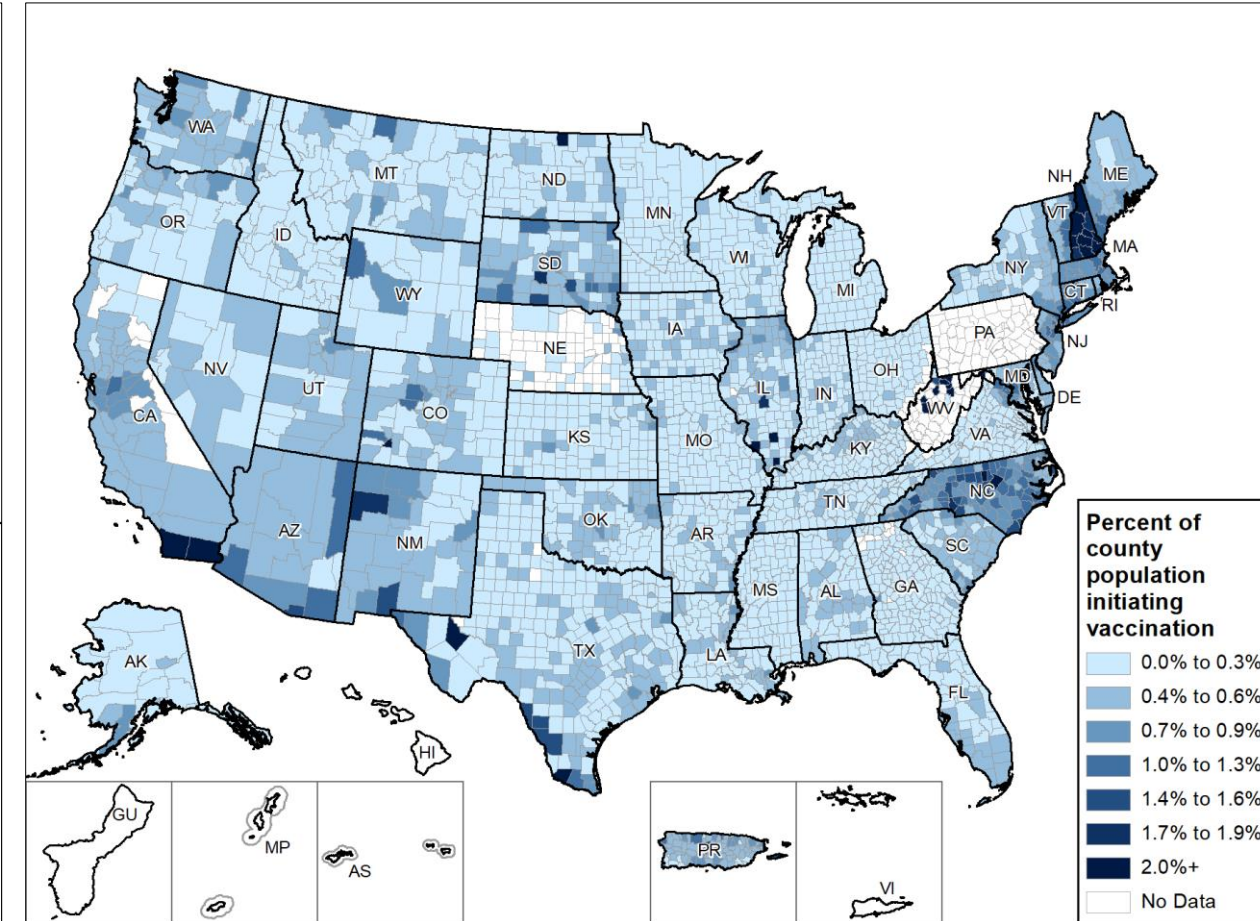
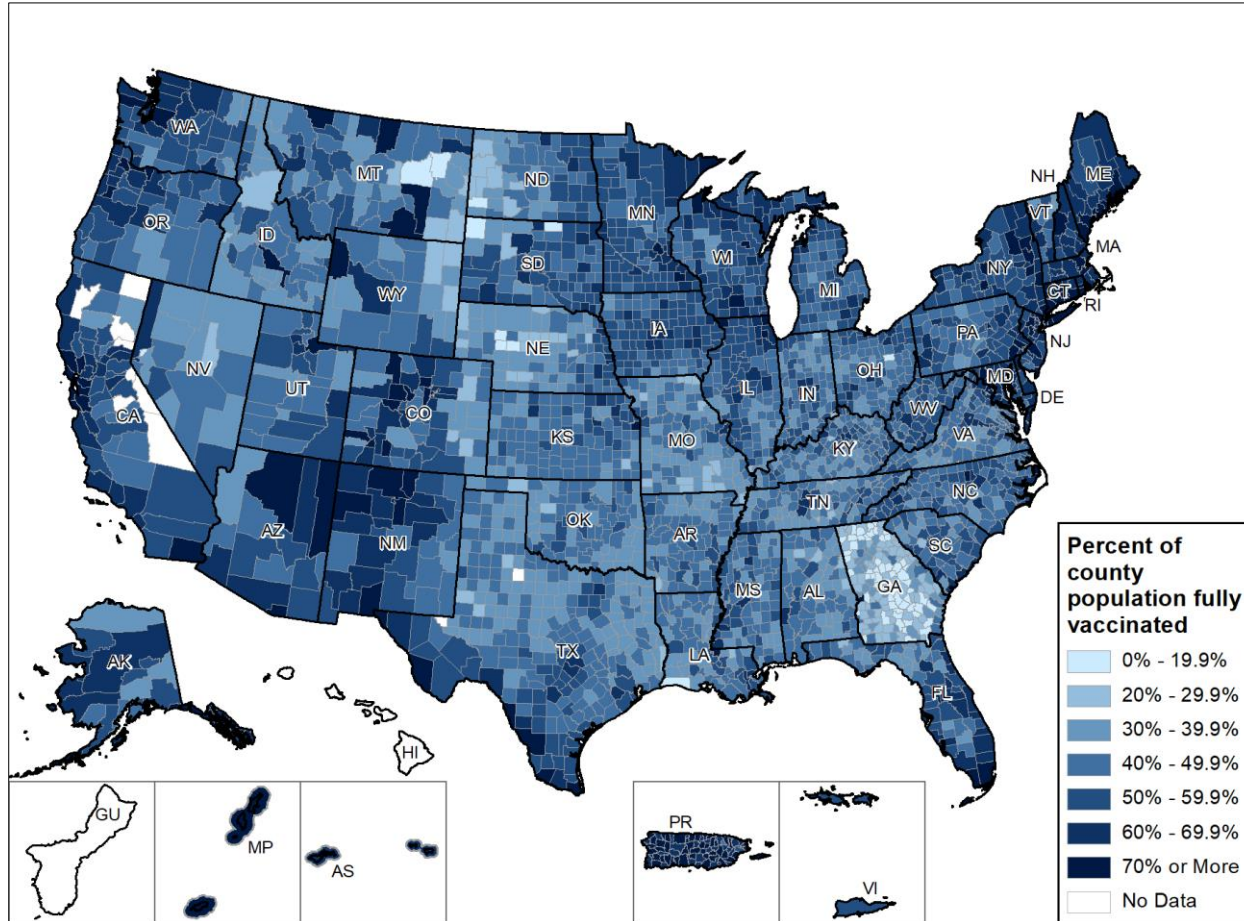
**Source:** Unified Hospital Dataset, excluding psychiatric, rehabilitation, and religious non-medical hospitals. Staffed adult ICU COVID-19 utilization indicates average percentage of staffed adult ICU beds occupied by confirmed COVID-19 patients within the given time period. HSA indicates Hospital Service Area. Hospitals are assigned to HSA based on zip code where known. In some areas, reports are aggregates of multiple facilities that cross HSA boundaries; in these cases, values are assigned based on the zip code for the aggregate. See Data Sources/Methods slides for additional details.



# VACCINATION RATES BY COUNTY

**Percent of Population Fully Vaccinated: 61.8%**  
**Percent of Population with at Least 1 Dose: 73.0%**

**Percent of Population Initiating Vaccination in the Last Week: 0.2%**



**Source:** Unified COVID-19 Vaccine Dataset. Fully vaccinated indicates those who received the second dose of Pfizer-BioNTech or Moderna vaccines and those who received one dose of J&J/Janssen COVID-19 vaccine. Initiating vaccination indicates those who have received the first dose of the Pfizer-BioNTech or Moderna vaccines and those who have received a dose of the J&J/Janssen vaccine in the last week. Values reflect total by report date, not administered date. In instances where the number of people fully vaccinated is greater than those with at least one dose for a specific county, the county will have "no data" on the map of population initiating vaccination; see COVID Data Tracker for further information. The following states have  $\leq 80\%$  completeness reporting vaccinations by county, which may result in underestimates of vaccination data for counties and CBSAs: VT (74%), GA (60%), HI (0%)

On 12/23/2021, WV issued a correction to their vaccination data, resulting in negative values for people initiating vaccination.

On 12/21/2021, PA issued a correction to their vaccination data, resulting in negative values for people initiating vaccination in PA and Region 3.

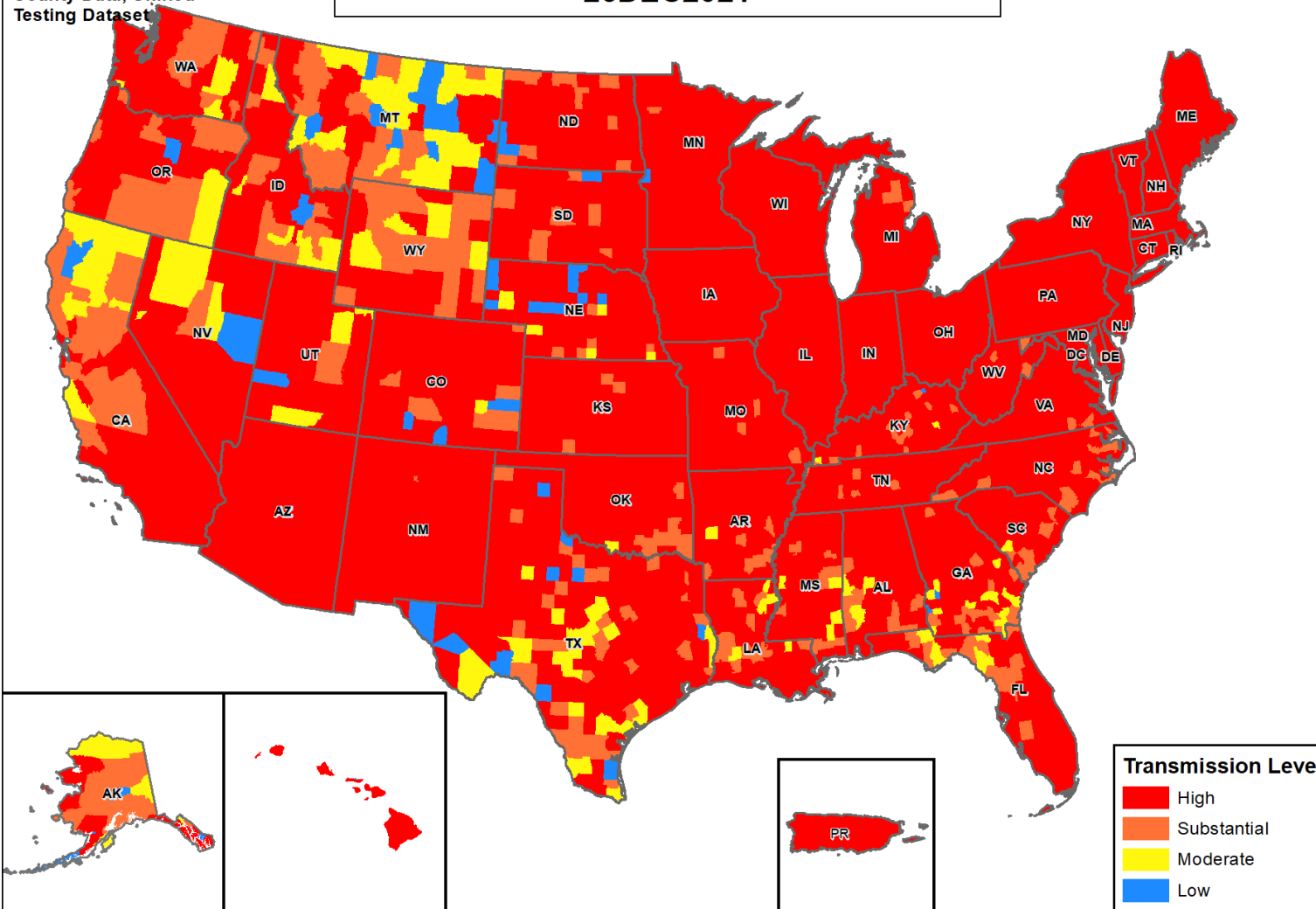
Idaho provides vaccine data only for vaccine recipients who are 18 years and older, in line with state laws. COVID-19 vaccination administration data are unavailable for the Idaho population aged less than 18 years.

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# COMMUNITY TRANSMISSION LEVEL

Date: 12/27/2021  
Source: CDC Aggregate  
County Data, Unified  
Testing Dataset

## Community Transmission Level by County 26DEC2021



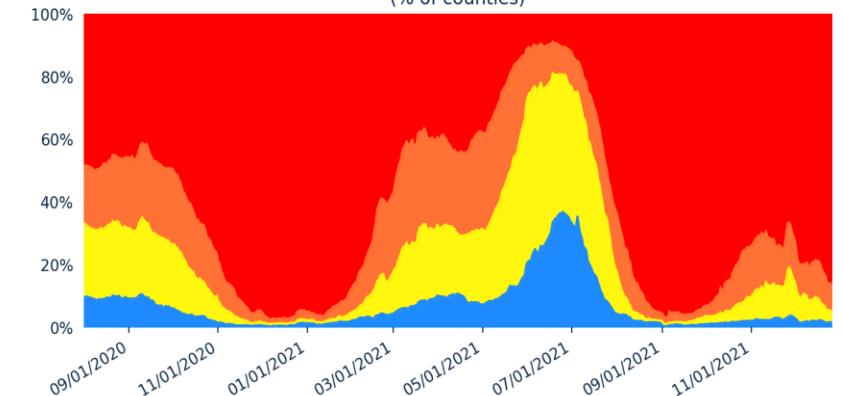
## Counties by Community Transmission Indicator

Cases per 100k	0 to 9	10 to 49	50 to 99	100 +
# of counties (change)	102 (↓10)	209 (↑4)	425 (↑14)	2484 (↓8)
% of counties (change)	3.2% (↓0.3%)	6.5% (↑0.1%)	13.2% (↑0.4%)	77.1% (↓0.2%)
Test Positivity	0.0% to 4.9%	5.0% to 7.9%	8.0% to 9.9%	10.0% +
# of counties (change)	413 (↓189)	372 (↓201)	332 (↓67)	2103 (↑457)
% of counties (change)	12.8% (↓5.9%)	11.6% (↓6.2%)	10.3% (↓2.1%)	65.3% (↑14.2%)

## Counties by Combined Transmission Level

Category	Low Transmission Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
# of counties (change)	50 (↓16)	122 (↓54)	280 (↓84)	2768 (↑154)
% of counties (change)	1.6% (↓0.5%)	3.8% (↓1.7%)	8.7% (↓2.6%)	86.0% (↑4.8%)
% of population (change)	0.0% (↓0.0%)	0.9% (↓1.4%)	5.6% (↓6.4%)	93.4% (↑7.9%)

Combined Transmission Levels Over Time  
(% of counties)



**Source:** CDC Aggregate County Dataset (cases), Unified Testing Dataset (tests)

**Notes:** Cases data from December 20-26, test positivity data from December 18-24. Combined Transmission Level is the higher threshold among cases and testing thresholds. See Data Sources/Methods slides for additional details.

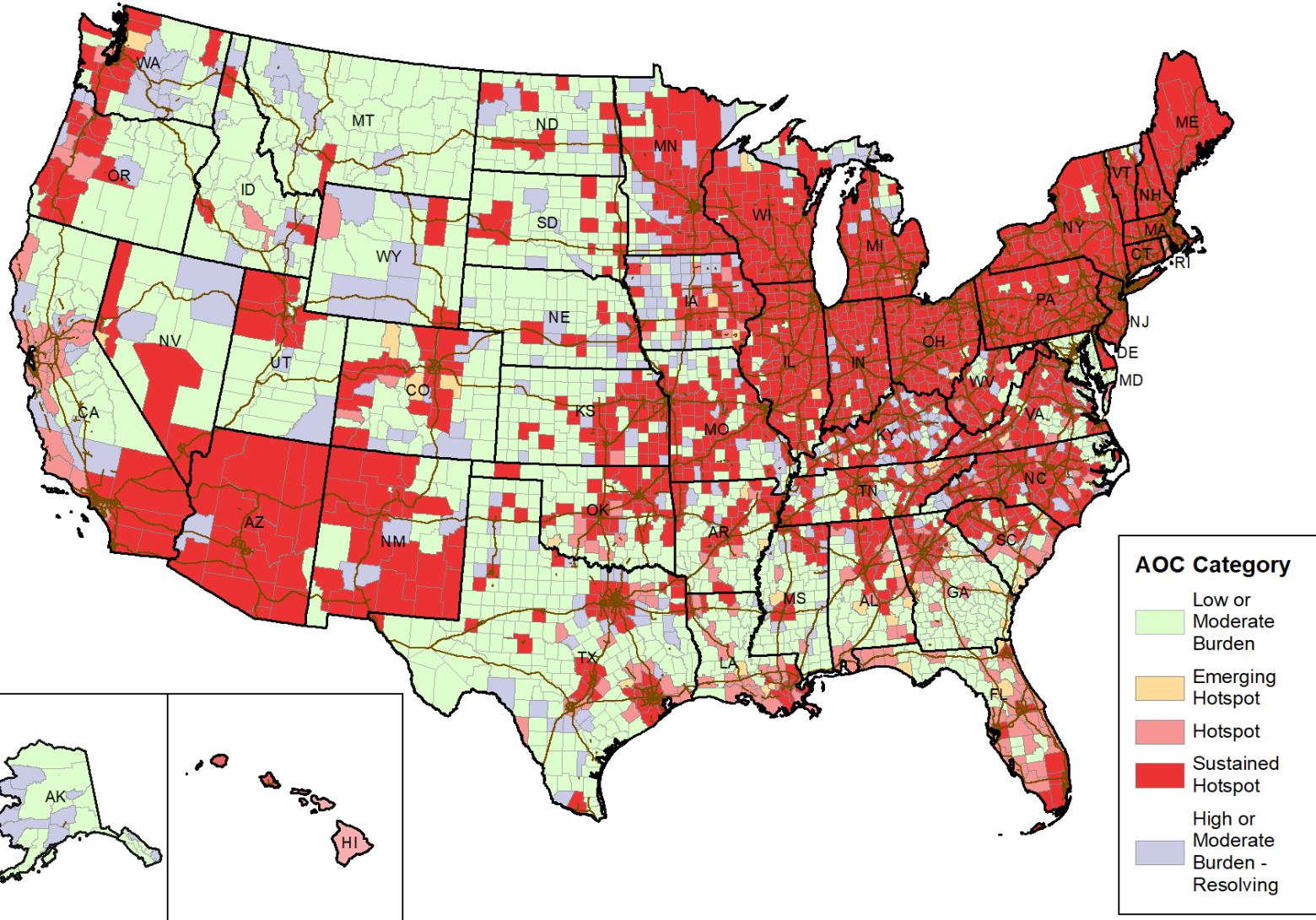
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# AREA OF CONCERN CONTINUUM

Date: 12/27/2021

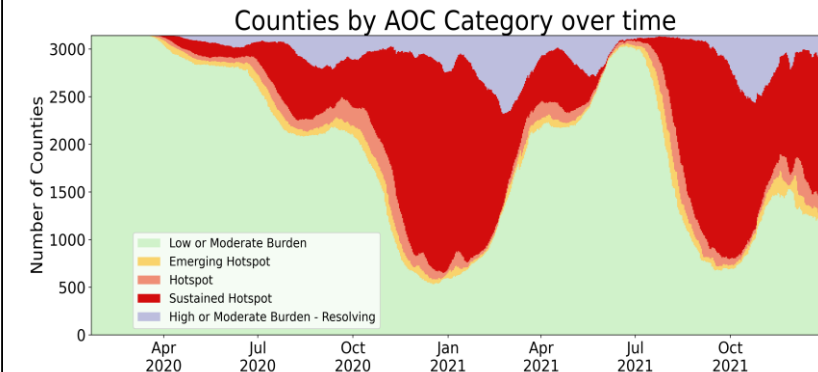
## Area of Concern Continuum by County 26DEC2021



The Areas of Concern Continuum (AOCC) is used to describe communities as they progress through stages of the epidemic. There are 7 possible AOC classifications based on current and recent history of case and testing data for the location:

- (1) **Low Burden** – communities with minimal activity
- (2) **Moderate Burden** – communities with moderate disease activity
- (3) **Emerging Hotspot** – communities with a high likelihood to become hotspots in the next 1-7 days
- (4) **Hotspot** – communities that have reached a threshold of disease activity considered as being of high burden
- (5) **Sustained Hotspot** – communities that have had a high sustained case burden and may be higher risk for experiencing healthcare resource limitations
- (6) **High Burden – Resolving** – communities that were recently identified as hotspots and are now improving
- (7) **Moderate Burden – Resolving** – communities that have a moderate level of burden, but are demonstrating improvement

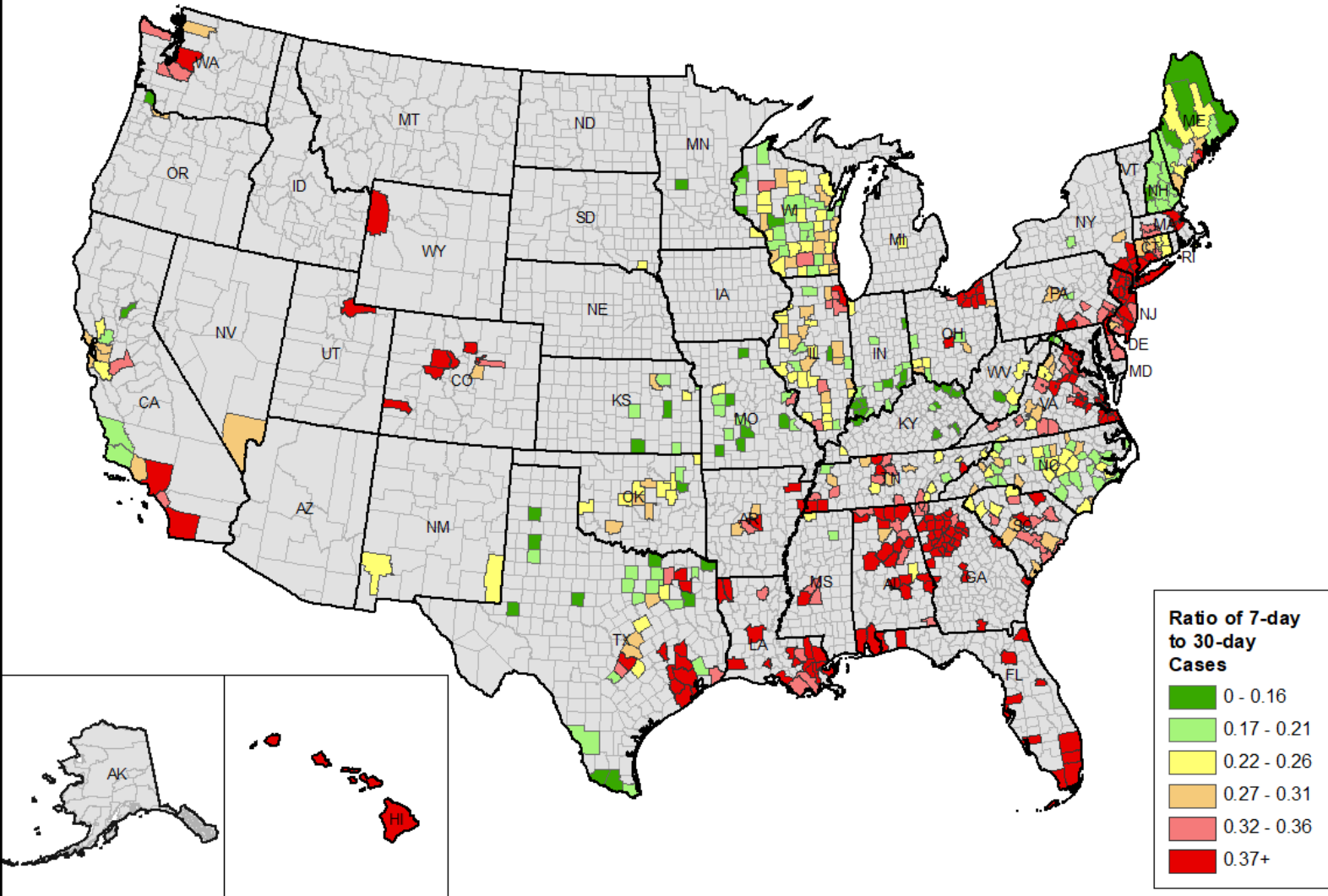
See Data Sources/Methods slides for more information.



# AREA OF CONCERN CONTINUUM - RAPID RISER COUNTIES

Date: 12/27/2021  
Source: CDC Aggregate  
County Data

## Counties with Rapid Rise in Cases in the Last 14 Days



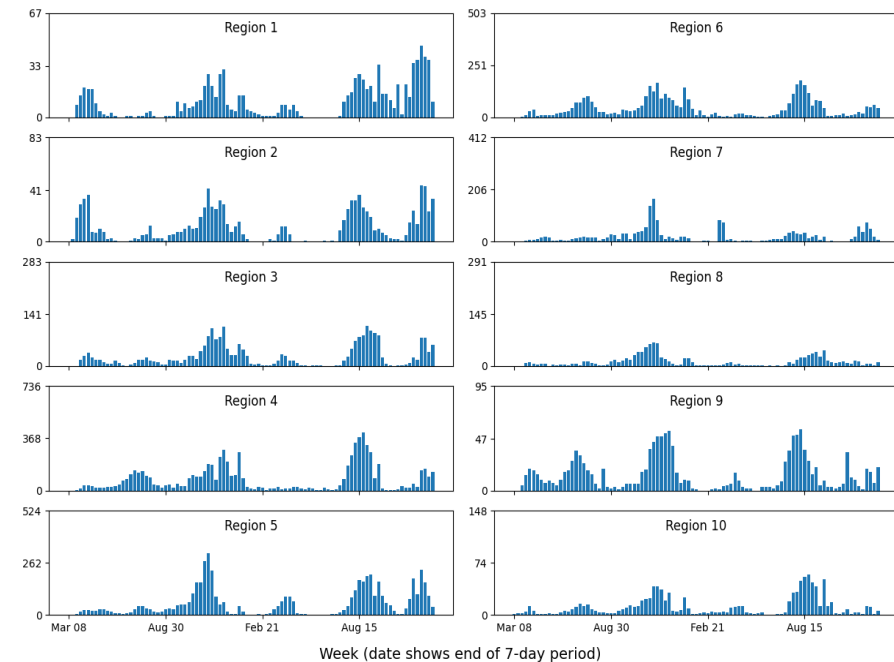
This map shows counties that have seen a rapid rise in cases within the last 14 days by meeting the following **Rapid Riser County** criteria:

- >100 new cases in last 7 days
- >0% change in 7-day incidence
- >-60% change in 3-day incidence
- 7-day incidence / 30-day incidence ratio >0.31
- one or both of the following triggering criteria:
  - (a) >60% change in 3-day incidence,
  - (b) >60% change in 7-day incidence

The color indicates *current* acceleration in cases (ratio of 7-day to 30-day cases). Counties in **light red** and **red** are continuing to see accelerating cases in the most recent week, while those in **dark green** and **green** may have seen declines in the most recent week.


The bar charts below show the history of rapid riser counties by FEMA region and week, indicating when different geographic areas have seen the greatest acceleration in cases.

**# of Distinct Rapid Riser Counties by Week and FEMA Region**  
(vertical axis scaled to number of counties in region)













# NATIONAL AND REGIONAL METRICS

## National Metrics

	Last 7 days					Change from previous week					Daily case trend - last 8 weeks
	Cases (per 100k)	NAAT positivity	Confirmed admissions (per 100 beds)	ICU COVID-19 utilization	Deaths (per 100k)	Pct change in cases	Absolute change in NAAT pos.	Pct change in conf. adm. per 100 beds	Absolute change in ICU COVID-19 util.	Pct change in deaths	
U.S Total - Last 7 Days	1,446,042 (436)	14.7%	54,404 (7.9)	20%	7,291 (2.2)	+51%	+6.2%	+0%	1%	-11%	
U.S. Total - 1 Week Ago	955,153 (288)	8.4%	54,974 (7.9)	19%	8,151 (2.5)	+14%	+1.3%	-0%	1%	+4%	
U.S. Total - Dec 2021 Peak	1,446,042 (436)	15.7%	57,495 (8.3)	20%	8,617 (2.6)						
U.S. Total - Nov 2021 Peak	662,655 (200)	7.7%	45,273 (6.6)	16%	8,588 (2.6)						
U.S. Total - Oct 2021 Peak	752,424 (227)	6.4%	54,983 (7.8)	24%	12,349 (3.7)						
U.S. Total - Sep 2021 Peak	1,149,668 (346)	9.5%	85,373 (12.1)	29%	13,457 (4.1)						
U.S. Total - Aug 2021 Peak	1,128,632 (340)	10.5%	85,996 (12.2)	29%	10,779 (3.2)						
U.S. Total - Jul 2021 Peak	576,203 (174)	9.8%	47,727 (6.7)	12%	3,079 (0.9)						
U.S. Total - Jun 2021 Peak	116,720 (35)	2.4%	17,939 (2.5)	7%	3,056 (0.9)						
U.S. Total - May 2021 Peak	346,816 (104)	4.3%	33,642 (4.7)	11%	4,703 (1.4)						
U.S. Total - Apr 2021 Peak	488,824 (147)	5.5%	39,411 (5.5)	11%	5,590 (1.7)						

Last 7 days indicates cases/deaths data from 12/20-12/26, admissions data from 12/19-12/25, and testing data from 12/18-12/24.

## Regional Metrics

FEMA Region (Population)	Last 7 days					Change from previous week					Daily case trend - last 8 weeks
	Cases (per 100k)	NAAT positivity	Confirmed admissions (per 100 beds)	ICU COVID-19 utilization	Deaths (per 100k)	Pct change in cases	Absolute change in NAAT pos.	Pct change in conf. adm. per 100 beds	Absolute change in ICU COVID-19 util.	Pct change in deaths	
Region 2 (31,635,735)	372,093 (1,176)	16.2%	6,397 (8.7)	14%	569 (1.8)	+126%	+6.8%	+20%	2%	+2%	
Region 4 (66,908,139)	270,774 (405)	17.3%	8,277 (5.5)	11%	682 (1.0)	+115%	+8.6%	+17%	1%	-14%	
Region 5 (52,542,063)	259,015 (493)	15.4%	14,884 (13.3)	32%	2,214 (4.2)	+3%	+3.9%	-6%	1%	-4%	
Region 3 (30,854,848)	166,767 (540)	15.8%	6,459 (10.0)	23%	972 (3.2)	+57%	+4.7%	-3%	1%	-10%	
Region 9 (51,554,700)	117,885 (229)	9.1%	5,107 (6.0)	17%	1,027 (2.0)	+57%	+5.4%	-0%	-0%	-5%	
Region 1 (14,845,063)	91,698 (618)	8.5%	2,560 (8.0)	27%	402 (2.7)	+22%	+1.7%	-11%	3%	+2%	
Region 6 (42,716,279)	77,110 (181)	16.5%	4,951 (5.6)	16%	540 (1.3)	+19%	+6.7%	+0%	0%	-31%	
Region 7 (14,140,220)	38,256 (271)	13.8%	2,976 (8.7)	29%	330 (2.3)	-21%	+0.5%	-12%	1%	-17%	
Region 8 (12,258,952)	31,358 (256)	10.7%	1,939 (8.0)	28%	343 (2.8)	+21%	+3.4%	-8%	-4%	-24%	
Region 10 (14,351,240)	21,086 (147)	10.6%	854 (3.9)	15%	212 (1.5)	+14%	+4.1%	-6%	-0%	-32%	
























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


















# STATE PROFILES AND WEEKLY CATEGORIES

Weekly Categorization of States, DC, and Territories: color categories based on last week's CDC combined transmission level data (baseline dates: December 17-23)  
Case Data from December 20-26, Admissions Data from December 19-25, Test Positivity Data from December 18-24

## High Transmission States/Territories

State	Last 7 days			Change from previous week			Daily case trend - last 8 weeks
	Cases (per 100k)	NAAT positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in NAAT pos.	Pct. change in conf. adm. per 100 beds	
AL	12,394 (253)	14.7%	479 (3.5)	+110%	+7.5%	+36%	
AK	642 (88)	4.6%	42 (3.0)	-46%	+1.5%	-27%	
AZ	18,246 (251)	13.4%	1,737 (12.2)	-12%	+1.4%	-5%	
AR	6,765 (224)	10.8%	369 (4.8)	+30%	+3.7%	-22%	
CA*	85,760 (217)	N/A	2,810 (4.6)	+90%	N/A	+6%	
CO	19,773 (343)	11.3%	1,096 (10.6)	+60%	+4.6%	+6%	
CT	18,991 (533)	10.4%	530 (6.9)	+18%	+1.4%	-30%	
DE	7,206 (740)	12.2%	237 (8.4)	+48%	+1.2%	-21%	
DC	8,346 (1,183)	16.2%	280 (9.6)	+232%	+9.6%	+96%	
FL	166,533 (775)	19.6%	2,669 (5.1)	+213%	+10.6%	+63%	
GA	41,926 (395)	23.8%	1,681 (9.1)	+224%	+15.2%	+63%	
HI	7,347 (519)	12.4%	71 (2.9)	+113%	+6.7%	+73%	
ID	1,759 (98)	10.3%	138 (4.8)	-23%	+2.5%	-18%	
IL	77,246 (610)	12.7%	3,388 (12.0)	+30%	+5.3%	+7%	
IN	19,372 (288)	17.6%	2,323 (15.8)	-37%	+1.2%	+3%	
IA	10,968 (348)	12.9%	736 (10.4)	+2%	-0.8%	-6%	
KS	7,733 (265)	14.3%	627 (8.1)	-34%	+0.3%	-11%	
KY	8,968 (201)	11.8%	1,310 (13.6)	-37%	+1.5%	+5%	
LA	9,705 (209)	14.8%	511 (4.5)	+105%	+9.9%	+124%	
ME	5,379 (400)	10.8%	204 (6.9)	-16%	+0.5%	-31%	
MD	42,194 (698)	16.3%	1,274 (12.6)	+148%	+7.2%	+17%	
MA	50,049 (726)	8.6%	1,330 (8.6)	+39%	+2.7%	+10%	
MI	31,437 (315)	18.0%	2,636 (13.0)	-32%	+2.6%	-12%	

## High Transmission States/Territories

State	Last 7 days			Change from previous week			Daily case trend - last 8 weeks
	Cases (per 100k)	NAAT positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in NAAT pos.	Pct. change in conf. adm. per 100 beds	
MN	16,941 (300)	9.2%	729 (7.6)	-25%	-0.3%	-28%	
MS	3,047 (102)	20.0%	179 (2.2)	-9%	+9.2%	+4%	
MO	14,599 (238)	13.7%	1,303 (8.7)	-29%	+1.1%	-12%	
MT	905 (85)	7.2%	127 (4.7)	-13%	+1.5%	-21%	
NE	4,956 (256)	16.2%	310 (7.3)	-9%	-0.3%	-22%	
NV	5,993 (195)	16.7%	397 (5.5)	+15%	+6.7%	-19%	
NH	6,931 (510)	12.0%	294 (11.2)	-19%	-0.5%	-16%	
NJ	98,198 (1,106)	19.1%	2,325 (11.0)	+132%	+7.4%	+30%	
NM	5,859 (279)	13.7%	401 (10.5)	-16%	-6.2%	-9%	
NY	237,310 (1,220)	15.2%	3,950 (9.1)	+105%	+6.5%	+14%	
NC	18,324 (175)	11.2%	613 (2.9)	+26%	+2.6%	-52%	
ND	1,994 (262)	7.1%	127 (6.8)	-13%	-0.1%	+2%	
OH	84,768 (725)	22.8%	4,064 (14.7)	+37%	+4.4%	-7%	
OK	10,468 (265)	14.0%	874 (9.9)	+53%	+2.6%	-7%	
OR	5,273 (125)	5.9%	255 (3.7)	+3%	+2.3%	+7%	
PA	64,229 (502)	15.7%	3,170 (11.4)	+22%	+2.0%	-11%	
PR	36,035 (1,128)	20.0%	121 (1.4)	+468%	+10.0%	+155%	
RI	8,475 (800)	6.1%	128 (6.3)	+52%	+0.6%	-39%	
SC	5,566 (108)	10.5%	513 (5.1)	-26%	+4.0%	+5%	
SD	2,022 (229)	12.4%	196 (7.8)	-16%	+0.2%	-18%	
TN	14,016 (205)	18.1%	833 (4.7)	-1%	+9.1%	+3%	
TX	44,313 (153)	18.1%	2,796 (4.9)	+8%	+8.9%	-2%	
UT	6,006 (187)	10.9%	324 (6.0)	-14%	+2.2%	-27%	

\*CA testing data has at least 4 days with no or minimal reporting in the last week (by the data cutoff time for this report), which may result in missing values and inaccurate test positivity.

The Weekly Categories slides indicate which states and territories fell in the high, substantial, moderate, and low transmission level categories at the beginning of the week (as of Friday data). The indicators shown here are fixed throughout the week and provide a common reference point for states from week to week.

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# STATE PROFILES AND WEEKLY CATEGORIES

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## High Transmission States/Territories

State	Last 7 days			Change from previous week			Daily case trend - last 8 weeks
	Cases (per 100k)	NAAT positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in NAAT pos.	Pct. change in conf. adm. per 100 beds	
VT	1,873 (300)	5.4%	74 (6.4)	-26%	+0.4%	+12%	
VA	40,548 (475)	16.6%	1,112 (6.8)	+86%	+5.3%	+1%	
WA	13,412 (176)	18.1%	419 (3.8)	+35%	+10.1%	-6%	
WV	4,244 (237)	12.1%	386 (7.9)	-42%	+0.6%	-13%	
WI	29,251 (502)	14.7%	1,744 (15.2)	-3%	+2.0%	-11%	
WY	658 (114)	6.2%	69 (4.7)	-9%	+1.5%	-23%	

## Low Transmission States/Territories

State	Last 7 days			Change from previous week			Daily case trend - last 8 weeks
	Cases (per 100k)	NAAT positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in NAAT pos.	Pct. change in conf. adm. per 100 beds	

## Substantial Transmission States/Territories

State	Last 7 days			Change from previous week			Daily case trend - last 8 weeks
	Cases (per 100k)	NAAT positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in NAAT pos.	Pct. change in conf. adm. per 100 beds	

## Moderate Transmission States/Territories

State	Last 7 days			Change from previous week			Daily case trend - last 8 weeks
	Cases (per 100k)	NAAT positivity	Confirmed admissions (per 100 beds)	Pct. change in cases	Abs. change in NAAT pos.	Pct. change in conf. adm. per 100 beds	

The Weekly Categories slides indicate which states and territories fell in the high, substantial, moderate, and low transmission level categories at the beginning of the week (as of Friday data). The indicators shown here are fixed throughout the week and provide a common reference point for states from week to week.

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# TRENDS IN CASE INCIDENCE DURING THE LAST 8 WEEKS

## Case incidence categories

(based on cases per 100,000 population in the last 7 days)

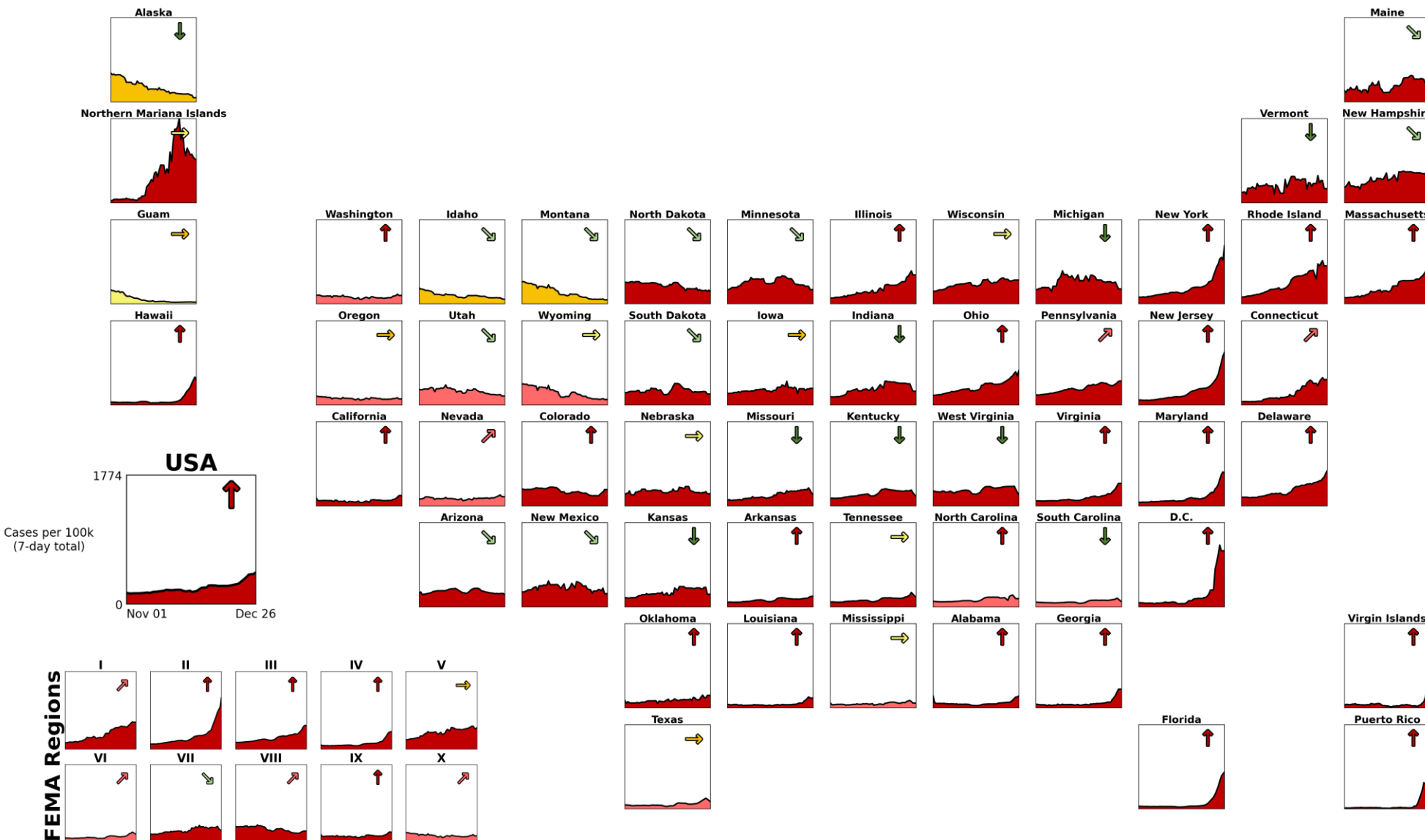
4 or less
5 - 9
10 - 49
50 - 99
100 - 199
200 or more

## Weekly % change categories

(arrow based on % change in weekly cases)

-26% or less	↓
-25% - -11%	↘
-10% - 0%	→
+1% - +10%	↗
+11% - +25%	↗
+26% or more	↑

Source: CDC state-reported data. See Data Sources/Methods slides for additional details.



# TRENDS IN MORTALITY RATE DURING THE LAST 4 WEEKS AND 4 WEEK FORECAST

## Mortality rate categories

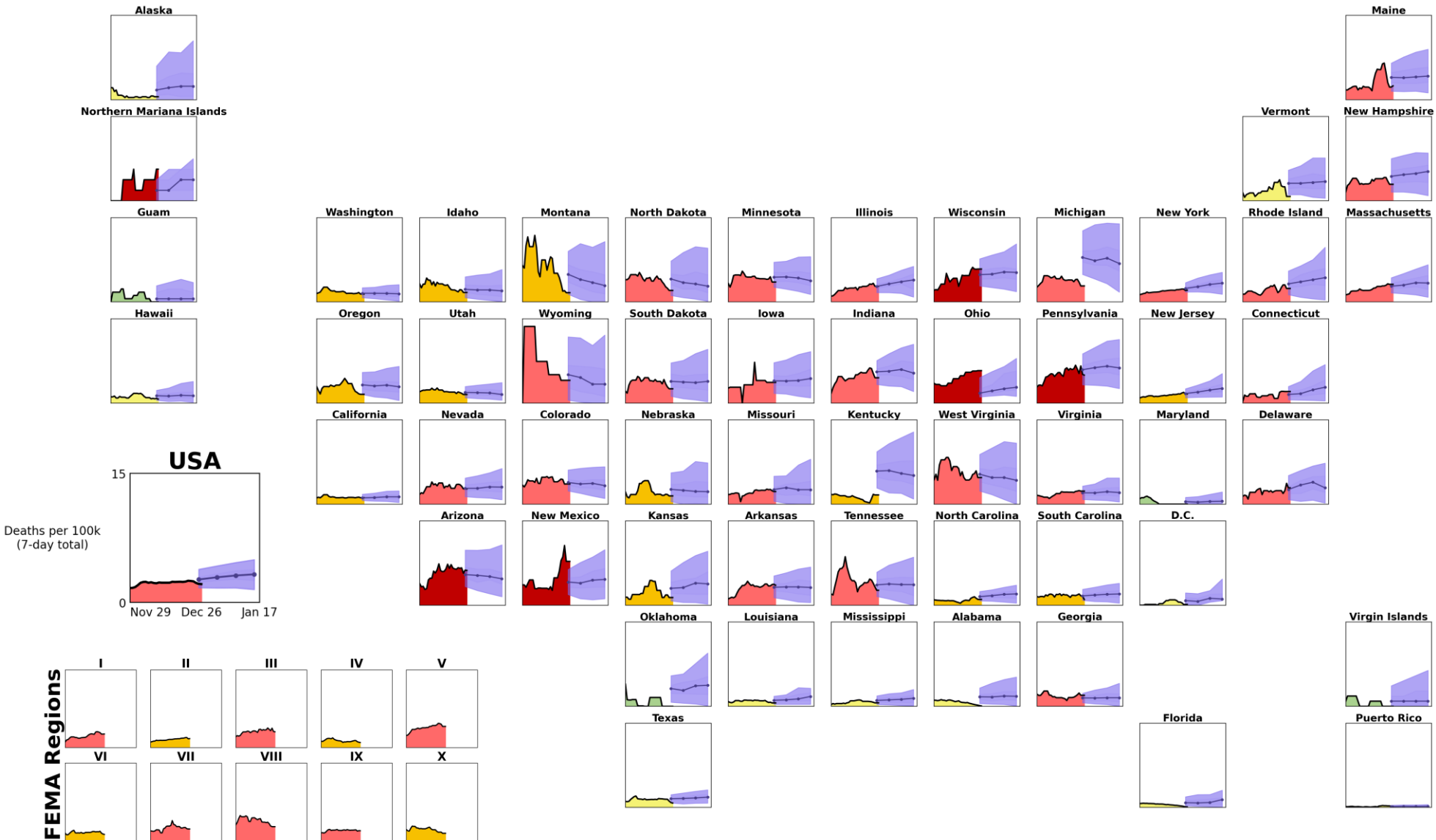
(based on deaths per 100,000 population in the last 7 days)



- Projected Deaths
- 50% Prediction Interval
- 95% Prediction Interval

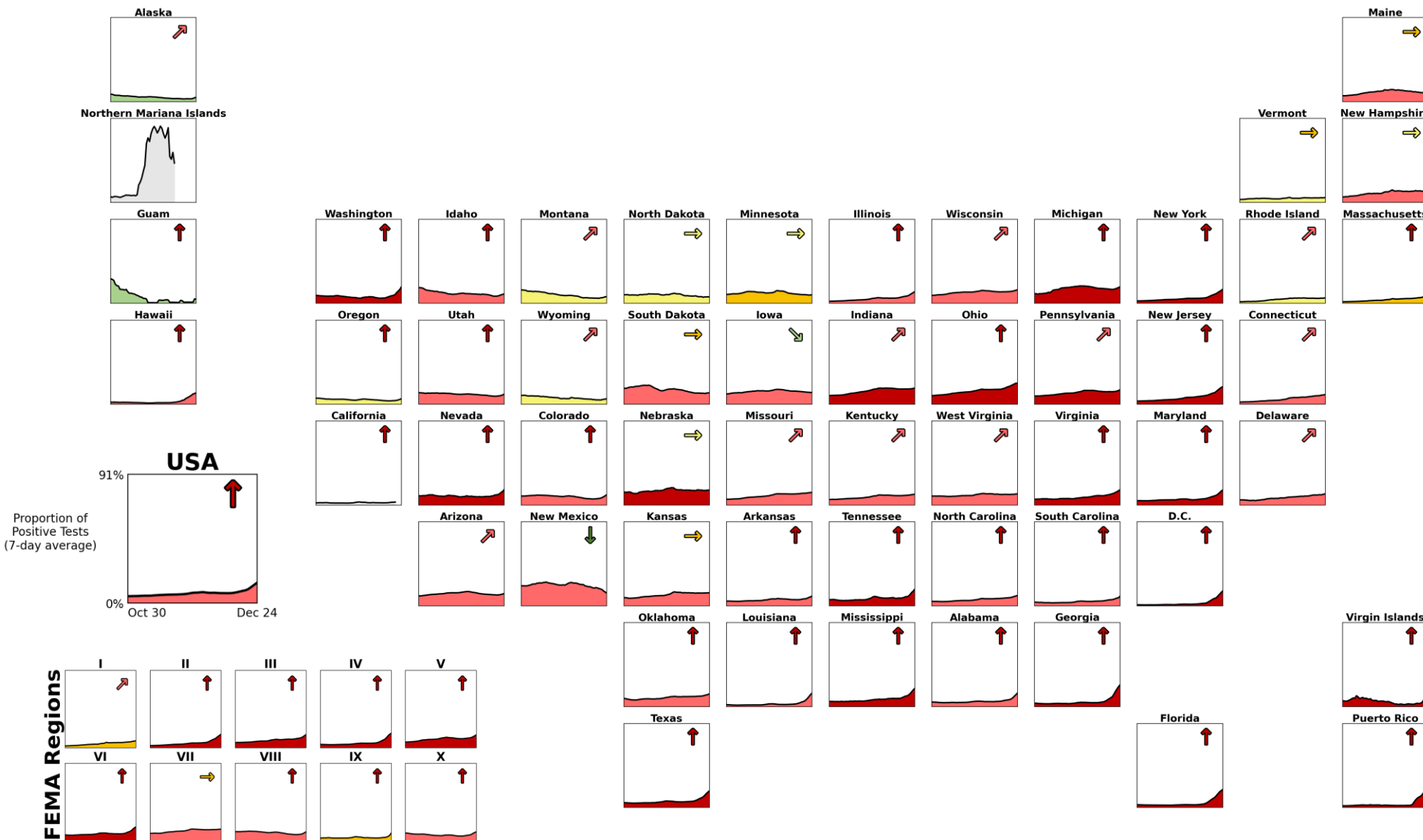
**Source:** CDC state-reported data. Indicates date of report for most states, but date of death for some. See Data Sources/Methods for additional details.

**Forecast:** The forecast displays projected weekly death totals using an ensemble of predictive models generated by academic, private industry, and governmental groups. Models make various assumptions about the levels of social distancing and other interventions, which may not reflect recent changes in behavior. FEMA regions are not included in the forecast. More information is available at [the COVID-19 Forecast Hub](https://www.cdc.gov/covid19/forecast.html). The forecast date is as of 12/20.



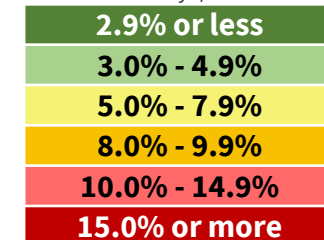
Due to a cyber attack still under investigation, Maryland has not updated deaths data since 12/05/2021.

# TRENDS IN NAAT POSITIVITY DURING THE LAST 8 WEEKS



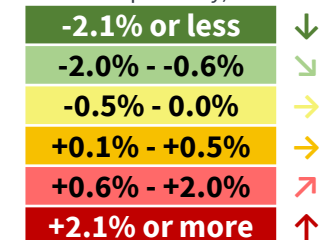
## NAAT positivity categories

(based on proportion of positive tests over the last 7 days)



## Weekly absolute change categories

(arrow based on absolute change in weekly NAAT positivity)



Most recent dates may be less reliable due to delayed reporting. States in gray have limited or no reporting in most recent week.

**Source:** Unified Testing Dataset. See Data Sources/Methods slides for additional details.

CA testing data has at least 4 days with no or minimal reporting in the last week (by the data cutoff time for this report), which may result in missing values and inaccurate test positivity.

# TRENDS IN EMERGENCY DEPARTMENT DISCHARGE DIAGNOSES DURING THE LAST 8 WEEKS

## Average percent of ED visits with COVID-19 discharge diagnosis

(based on proportion of discharge diagnoses including COVID-19 over the last 7 days)

**0.9% or less**

**1.0% - 2.9%**

**3.0% - 4.9%**

**5.0% - 7.9%**

**8.0% or more**

## Weekly absolute change

(based on change in COVID-19 diagnosis percentage, or COVID-19 ED visit percentage where diagnosis data is incomplete)

**-2% or less**

**-2% - -1%**

**-0% - +0%**

**+1% - +2%**

**+2%**

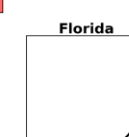
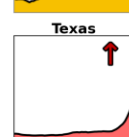
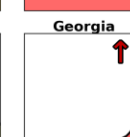
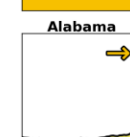
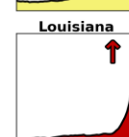
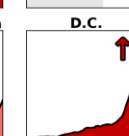
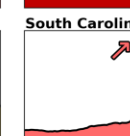
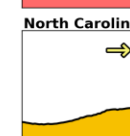
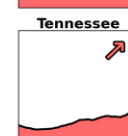
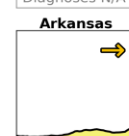
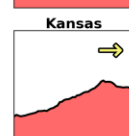
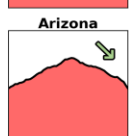
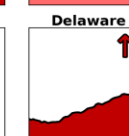
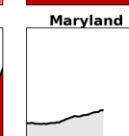
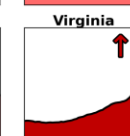
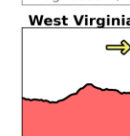
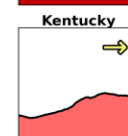
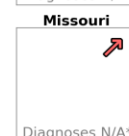
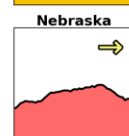
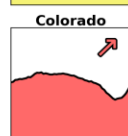
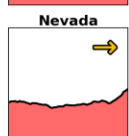
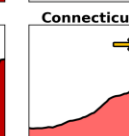
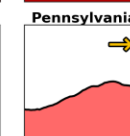
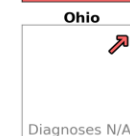
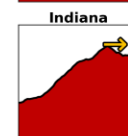
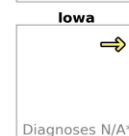
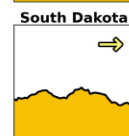
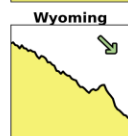
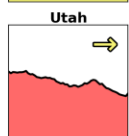
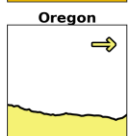
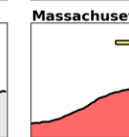
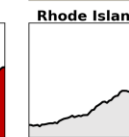
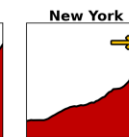
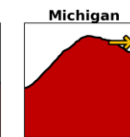
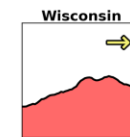
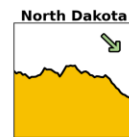
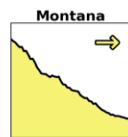
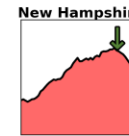
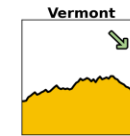
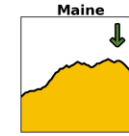
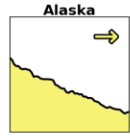
**+3% or more**



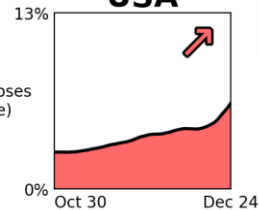
**Primary Source:** National Syndromic Surveillance Program (NSSP). <15% of ED facilities in CA, HI, IA, MN, and OK participate in NSSP. OH data stream is currently down due to a recent system upgrade. MO discharge diagnosis data is incomplete

**Secondary Source:** Unified Hospital Dataset ED visits. This includes all visits related to COVID-19, which includes patients that "meet suspected or confirmed definition or presents for COVID diagnostic testing".

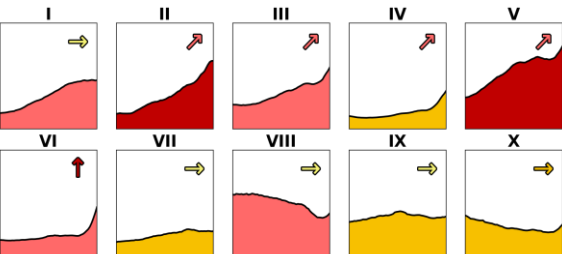
See Data Sources/Methods slides for additional details.



**USA**



**FEMA Regions**



\*Some states have low participation rates in NSSP (<15% of facilities) or unavailable ED diagnosis data. Therefore, the Unified Hospital Dataset was used to generate the trend arrow for comparison.

Trends missing data for the most recent day have been colored gray.

INITIAL PUBLIC RELEASE // SUBJECT TO CHANGE



# TRENDS IN HOSPITAL ADMISSIONS PER 100 BEDS DURING THE LAST 8 WEEKS

## Confirmed admission rate categories

(based on confirmed COVID-19 admissions per 100 beds over the last 7 days)

**1.0 or less**

**1.1 - 3.0**

**3.1 - 5.0**

**5.1 - 10.0**

**10.1 - 15.0**

**15.1 or more**

## Weekly % change categories

(arrow based on % change in weekly confirmed COVID-19 admissions)

**-26% or less**



**-25% - -11%**



**-10% - 0%**



**+1% - +10%**



**+11% - +25%**



**+26% or more**



Figure depicts confirmed hospital admissions per 100 inpatient beds.

Source: Unified Hospital Dataset. See Data Sources/Methods slides for additional details.



# TRENDS IN HOSPITAL INPATIENT COVID UTILIZATION DURING THE LAST 8 WEEKS

## Inpatient bed utilization categories

(based on average percentage of beds occupied by confirmed COVID-19 patients over the last 7 days)

**3% or less**

**4% - 7%**

**8% - 12%**

**13% - 15%**

**16% - 20%**

**21% or more**

## Weekly absolute change categories

(arrow based on absolute change in weekly % of beds occupied by confirmed COVID-19 patients)

**-2% or less**



**-1%**



**0%**



**+1%**



**+2%**



**+3% or more**



Source: Unified Hospital Dataset. See Data Sources/Methods slides for additional details.



# TRENDS IN STAFFED ADULT ICU BED CAPACITY DURING THE LAST 8 WEEKS

## Staffed Adult ICU COVID Utilization categories

(based on average percentage of beds occupied by confirmed COVID-19 patients over the last 7 days)

**3% or less**

**4% - 7%**

**8% - 12%**

**13% - 15%**

**16% - 20%**

**21% or more**

## Weekly absolute change categories

(arrow based on absolute change in weekly % of ICU beds occupied by confirmed COVID-19 patients)

**-2% or less**



**-1%**



**0%**



**+1%**



**+2%**

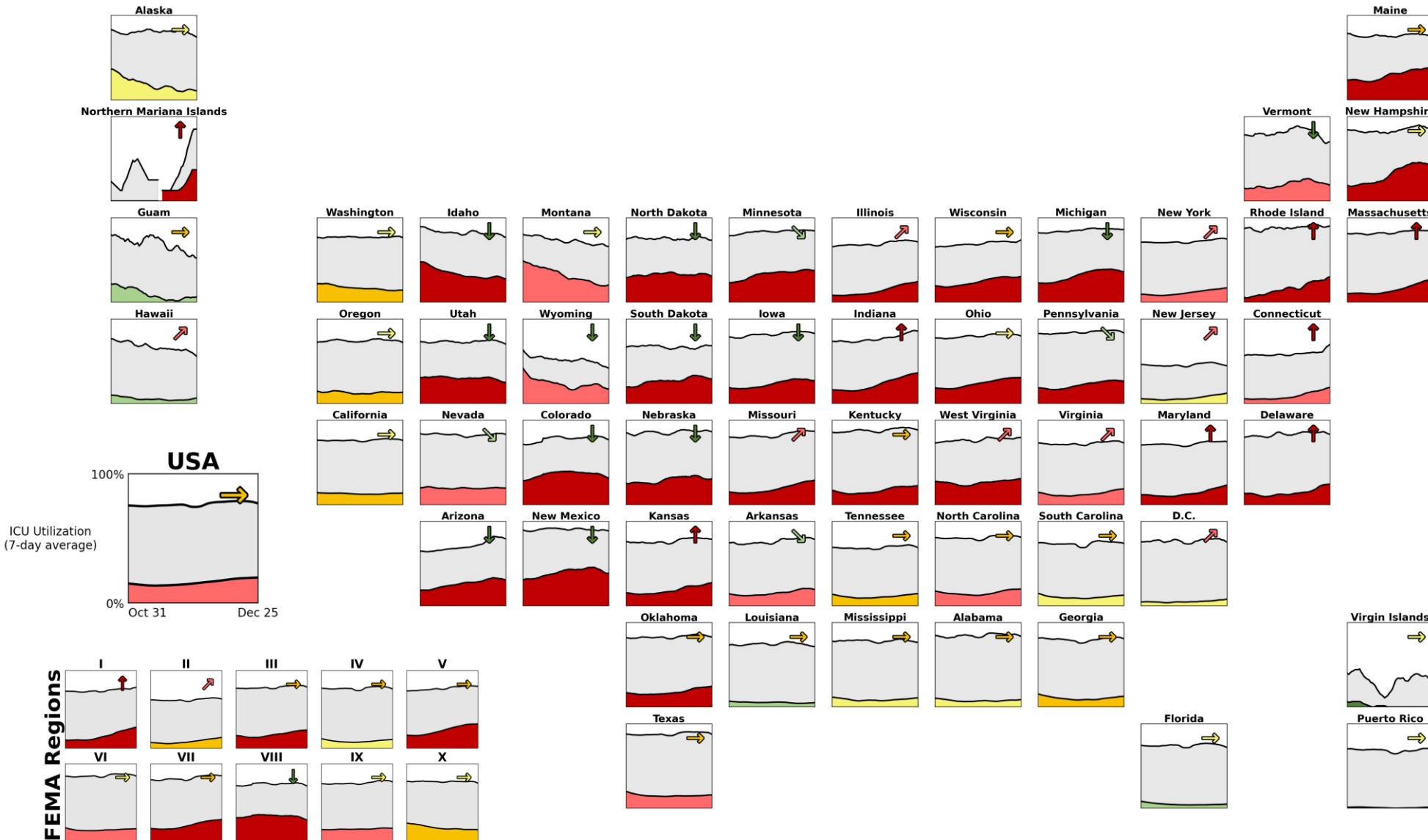


**+3% or more**



Color based on ICU confirmed COVID-19 utilization only. Light gray based on overall ICU utilization. Most recent dates may be less reliable due to delayed reporting.

**Source:** Unified Hospital Dataset. See Data Sources/Methods slides for additional details.



# TRENDS IN PERCENT OF POPULATION AGED 12+ INITIATING VACCINATION DURING THE LAST 8 WEEKS

## Percent of population 12+ initiating vaccination

(based on percent of population in last 7 days)

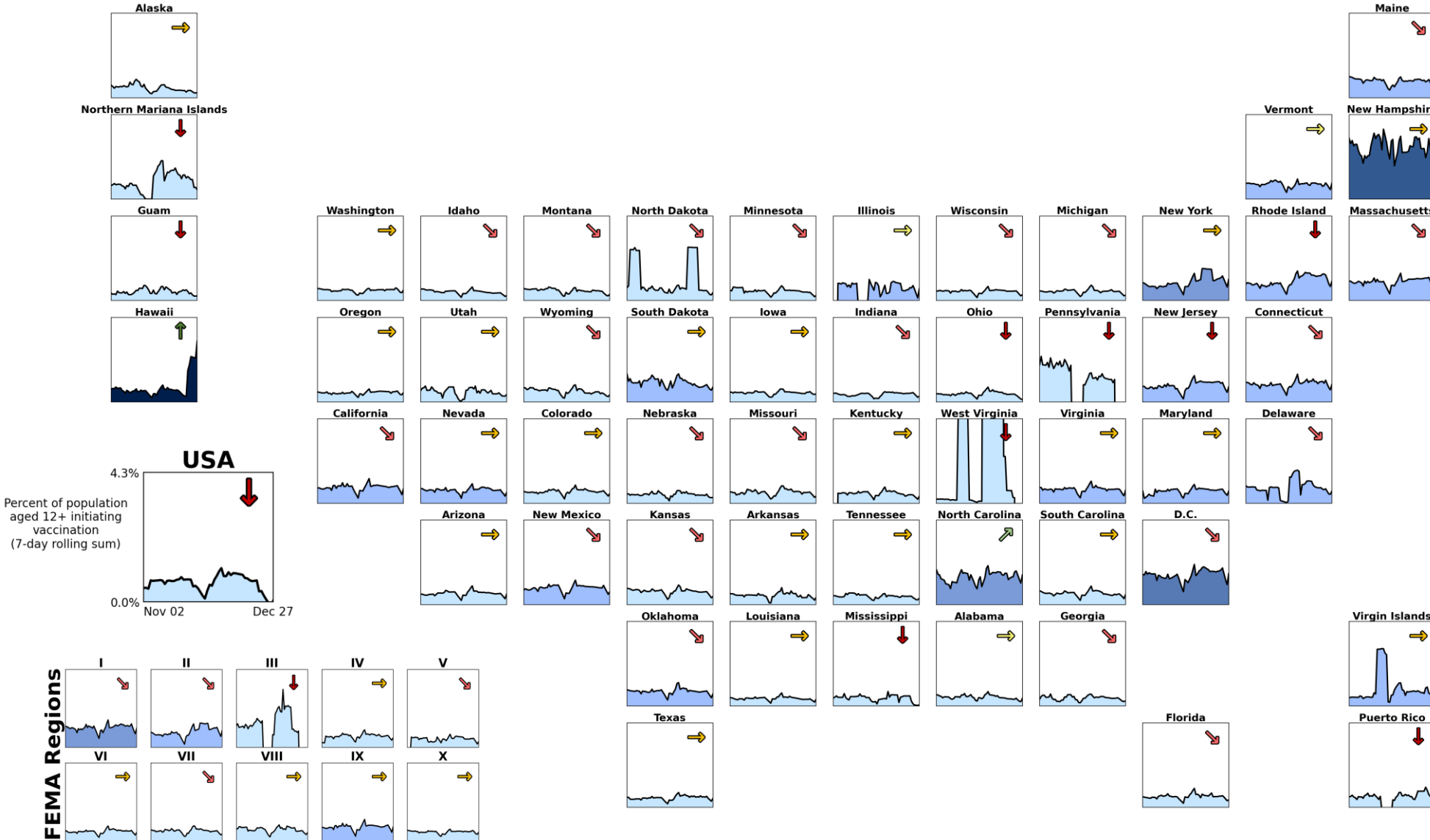


## Weekly absolute change categories

(arrow based on absolute change in percent of population)



Source: Unified COVID-19 Vaccine Dataset. See Data Sources/Methods slides for additional details.



On 12/23/2021, WV issued a correction to their vaccination data, resulting in negative values for people initiating vaccination.

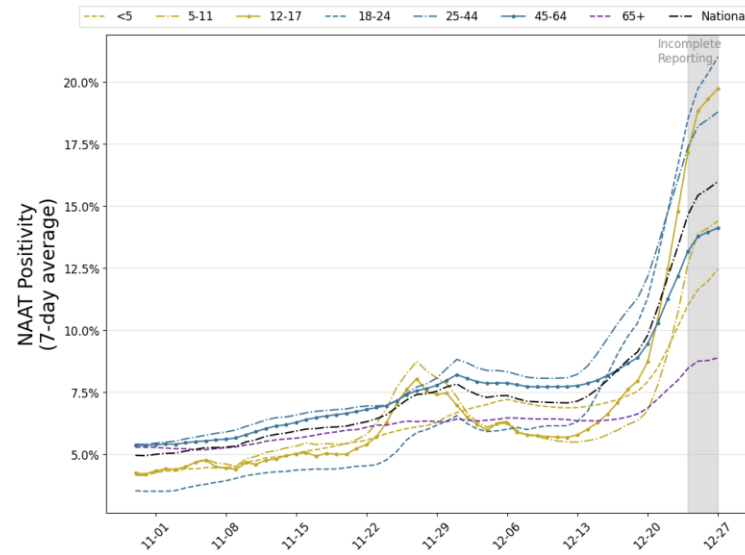
On 12/21/2021, PA issued a correction to their vaccination data, resulting in negative values for people initiating vaccination in PA and Region 3.

Idaho provides vaccine data only for vaccine recipients who are 18 years and older, in line with state laws. COVID-19 vaccination administration data are unavailable for the Idaho population aged less than 18 years.

INITIAL PUBLIC RELEASE // SUBJECT TO CHANGE

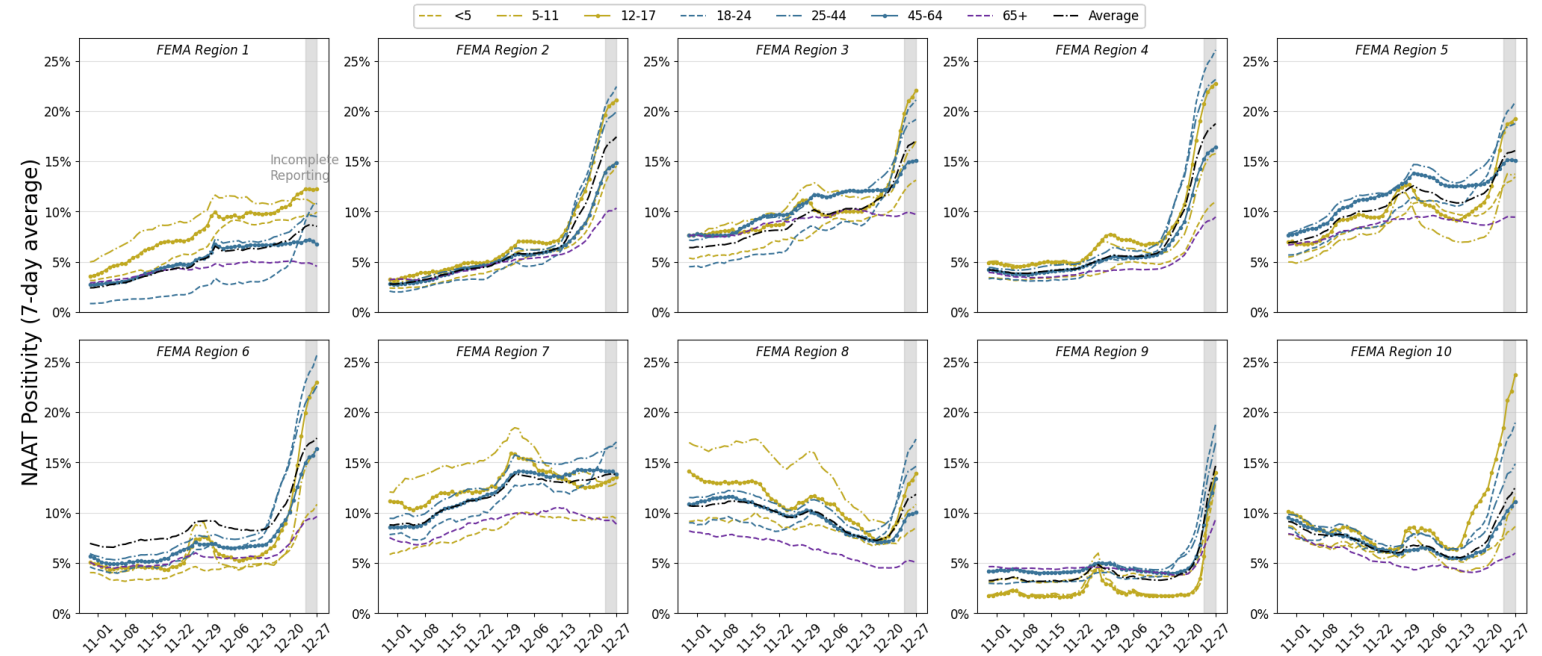
# TRENDS IN COVID-19 TEST POSITIVITY BY AGE GROUP AND REGION

## National



Age group	Test positivity (last 7 days)	abs. change from previous week
<5	11.0%	+3.8% ↑
5-11	12.7%	+6.7% ↑
12-17	17.2%	+10.1% ↑
18-24	18.5%	+9.5% ↑
25-44	17.4%	+7.1% ↑
45-64	13.2%	+4.8% ↑
65+	8.5%	+2.0% ↗

## Regional

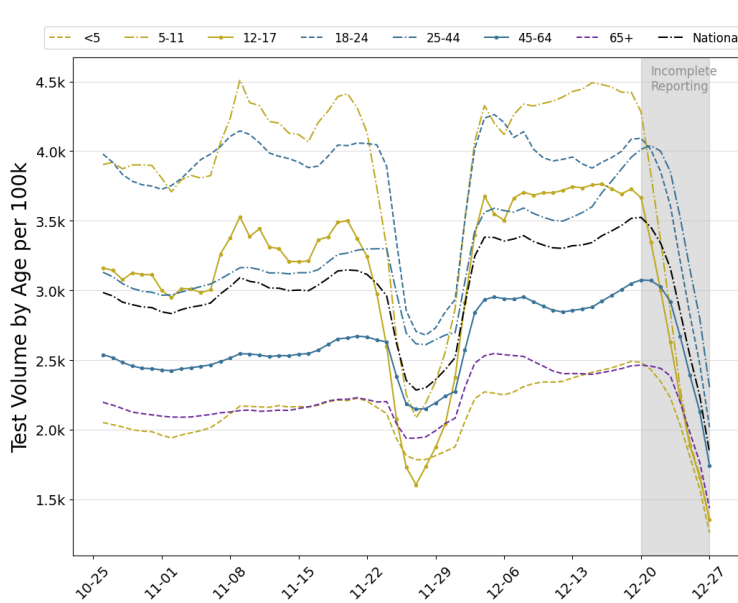


Age group	Region 1 abs. change	Region 2 abs. change	Region 3 abs. change	Region 4 abs. change	Region 5 abs. change	Region 6 abs. change	Region 7 abs. change	Region 8 abs. change	Region 9 abs. change	Region 10 abs. change
<5	+0.5% →	+5.6% ↑	+2.4% ↑	+4.3% ↑	+3.0% ↑	+4.2% ↑	+0.3% →	+0.8% ↗	+4.0% ↑	+1.7% ↗
5-11	+0.3% →	+6.1% ↑	+3.4% ↑	+7.7% ↑	+5.6% ↑	+9.3% ↑	-0.8% ↘	+0.4% →	+3.5% ↑	+3.4% ↑
12-17	+2.1% ↑	+9.1% ↑	+8.5% ↑	+11.7% ↑	+7.5% ↑	+12.5% ↑	+0.4% →	+4.4% ↑	+3.8% ↑	+7.8% ↑
18-24	+5.1% ↑	+8.5% ↑	+8.4% ↑	+12.4% ↑	+6.7% ↑	+11.2% ↑	+3.8% ↑	+7.2% ↑	+7.7% ↑	+7.9% ↑
25-44	+1.9% ↗	+7.6% ↑	+4.9% ↑	+10.1% ↑	+3.9% ↑	+8.9% ↑	+0.9% ↗	+4.9% ↑	+6.0% ↑	+5.3% ↑
45-64	+0.4% →	+5.9% ↑	+2.3% ↑	+7.4% ↑	+2.1% ↑	+6.8% ↑	-0.1% →	+2.1% ↑	+4.7% ↑	+3.5% ↑
65+	-0.1% →	+3.2% ↑	+0.1% →	+3.7% ↑	+0.5% →	+3.4% ↑	-0.7% ↘	+0.6% ↗	+2.7% ↑	+1.3% ↗

Source: Unified Testing Dataset. Figures show 7-day average over the last 8 weeks. See Data Sources/Methods slides for additional details. Absolute change is shown as light red if +0.6% to +2.0%, and dark red if +2.1% or higher.

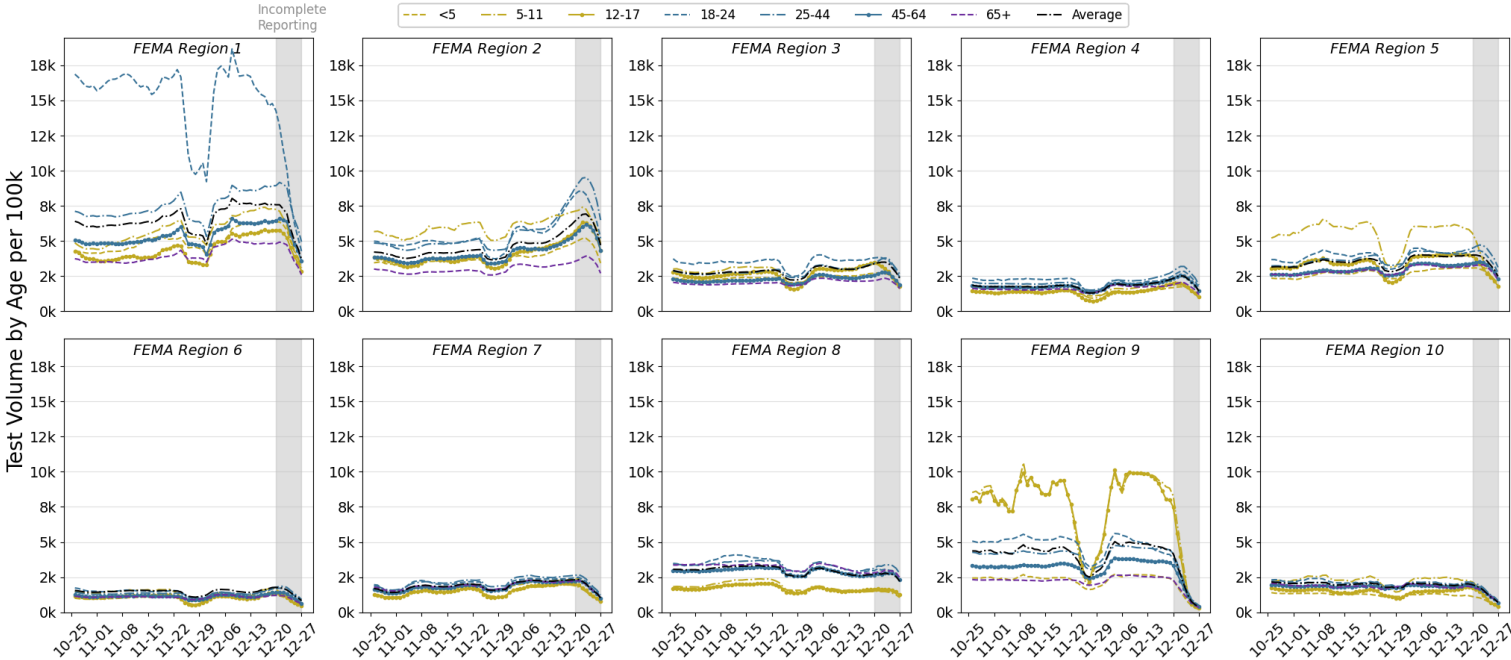
# TRENDS IN COVID-19 TEST VOLUME BY AGE GROUP AND REGION

## National



Age group	Test volume per 100k (last 7 days)	% change from previous week
<5	2,484	+5% →
5-11	4,282	-3% →
12-17	3,666	-2% →
18-24	4,092	+3% →
25-44	4,014	+14% ↗
45-64	3,076	+8% →
65+	2,465	+3% →

## Regional



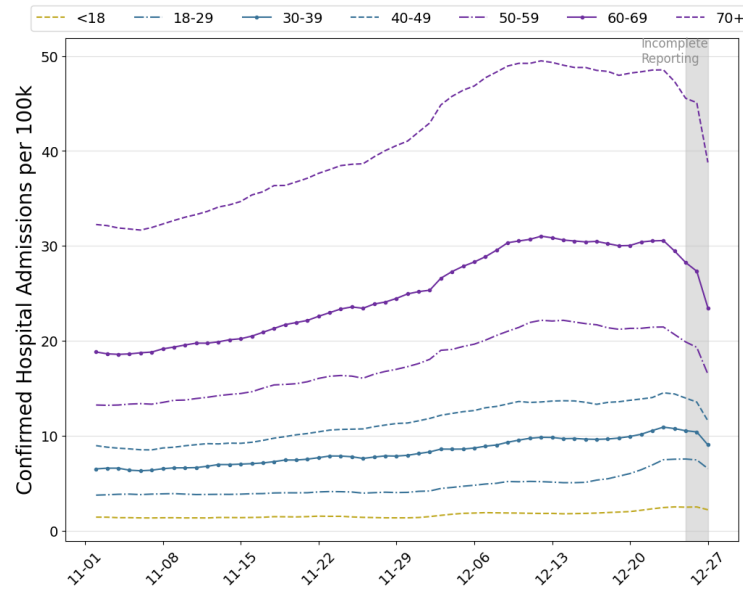
Age group	Region 1 % change	Region 2 % change	Region 3 % change	Region 4 % change	Region 5 % change	Region 6 % change	Region 7 % change	Region 8 % change	Region 9 % change	Region 10 % change
<5	+1% →	+18% ↗	+8% →	+13% ↗	+1% →	+30% ↑	+7% →	-5% →	-14% ↘	-11% ↘
5-11	+1% →	+7% →	+14% ↗	+16% ↗	-9% →	+37% ↑	+2% →	-5% →	-16% ↘	-13% ↘
12-17	+3% →	+21% ↗	+17% ↗	+31% ↑	-2% →	+41% ↑	+3% →	+10% →	-24% ↘	+10% →
18-24	-15% ↘	+43% ↑	+4% →	+20% ↗	+4% →	+30% ↑	+3% →	+6% →	-22% ↘	+6% →
25-44	+3% →	+44% ↑	+14% ↗	+26% ↑	+9% →	+37% ↑	+6% →	+2% →	-8% →	+3% →
45-64	+2% →	+22% ↗	+9% →	+20% ↗	+5% →	+28% ↑	+2% →	-2% →	-10% →	+3% →
65+	-2% →	+11% ↗	+2% →	+8% →	+3% →	+12% ↗	+3% →	-7% →	-9% →	+1% →

Source: Unified Testing Dataset. Figures show 7-day totals over the last 8 weeks. See Data Sources/Methods slides for additional details.



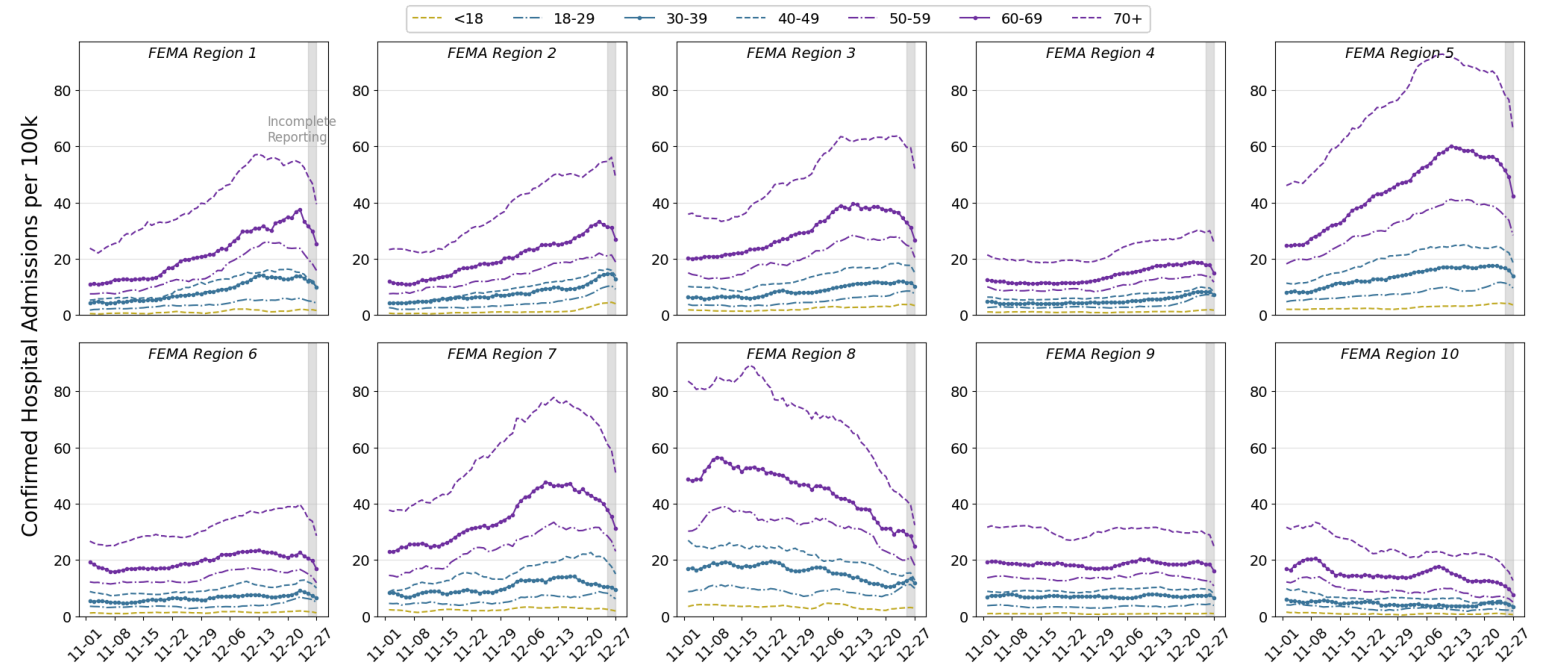
# TRENDS IN CONFIRMED COVID-19 ADMISSIONS BY AGE GROUP AND REGION

## National



Age group	Conf. admits per 100k (last 7 days)	% change from previous week
<18	2.5	+29% ↑
18-29	7.5	+38% ↑
30-39	10.5	+9% →
40-49	14.0	+3% →
50-59	19.9	-7% →
60-69	28.3	-7% →
70+	45.6	-6% →

## Regional



Age group	Region 1 % change	Region 2 % change	Region 3 % change	Region 4 % change	Region 5 % change	Region 6 % change	Region 7 % change	Region 8 % change	Region 9 % change	Region 10 % change
<18	+27% ↑	+121% ↑	+23% ↗	+48% ↑	+21% ↗	+10% →	-13% ↘	+32% ↑	+3% →	+12% ↗
18-29	-8% →	+65% ↑	+26% ↑	+82% ↑	+31% ↑	+34% ↑	+23% ↗	+55% ↑	+12% ↗	0% →
30-39	-11% ↘	+48% ↑	-2% →	+29% ↑	-1% →	+14% ↗	-18% ↘	+10% →	+5% →	+24% ↗
40-49	-20% ↘	+24% ↗	+6% →	+17% ↗	-5% →	+15% ↗	-10% →	-11% ↘	+3% →	+5% →
50-59	-23% ↘	+5% →	-7% →	+7% →	-11% ↘	-5% →	-6% →	-21% ↘	-12% ↘	-2% →
60-69	-5% →	+12% ↗	-15% ↘	-2% →	-10% →	-5% →	-14% ↘	-12% ↘	-0% →	-15% ↘
70+	-11% ↘	+11% ↗	-6% →	+8% →	-11% ↘	-10% →	-17% ↘	-22% ↘	-3% →	-24% ↘

Source: Unified Hospital Dataset. Figures show 7-day totals over the last 8 weeks. See Data Sources/Methods slides for additional details. Percent change is shown as light red if +11% to +25%, and dark red if +26% or higher.

## DATA NOTES

- Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in changes from day to day.
- **Population/Demographics:** Population and demographic data is from US Census Vintage 2019 Demographic Estimates.
- **Cases and Deaths:** COVID-19 case and death metrics at the state and county level are generated using a dataset managed by the CDC which is compiled from state and local health departments. Most states and localities report both confirmed and suspected cases and deaths, although some report just confirmed cases and deaths. To ensure data quality, daily data alerts are monitored for deviations in the data (e.g., decreases in cumulative values, no change in values, abnormal increases in values). These alerts are manually reviewed every day by checking the data against local government websites, state websites, and news sources, and the raw values are corrected as needed to reflect local government reports. Cases and deaths are based on date of report in most states, but on date of symptom onset or date of death in others. Some states use a combination of the two methods. For date of report states, there may be artificial spikes in any given day of data caused by delayed reporting; for date of event states, there are frequent updates to time series and it may take several days (for cases) or several weeks (for deaths) for complete data. This may cause artificial spikes in any given day of data. Changes in reporting may also cause temporary spikes or dips (e.g. shifts from reporting confirmed and probable cases to reporting just confirmed cases). Case data are presented as 7-day totals or averages to adjust for these anomalies as well as weekly variations in reporting. CBSA-level data are calculated by aggregating county/municipio-level data. Regional and national values are calculated by aggregating state-level data.
- **Testing:** CELR (COVID-19 Electronic Lab Reporting) state health department-reported data are used to describe state-level totals when able to be disaggregated from serology test results and to describe county-level totals when information is available on patients' county of residence or healthcare providers' practice location. HHS Protect laboratory data (provided directly to Federal Government from public health labs, hospital labs, and six commercial labs) are used otherwise. Some states did not report on certain days, which may affect the total number of tests resulted and positivity rate values. Total diagnostic tests are the number of tests performed, not the number of individuals tested. NAAT positivity rate is the number of positive tests divided by the number of tests performed and resulted. See <https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/calculating-percent-positivity.html> for more information on this method. Testing data may be backfilled over time, resulting in changes week-to-week in testing data.
- **Hospital Data:** Unified Hospital Dataset, including federal facilities (VA, DHA, and IHS hospitals) and excluding psychiatric, rehabilitation, and religious non-medical hospitals.
  - Hospital data are reported to HHS either directly from facilities or via a state submission. Data for hospitals with the same CMS Certification Number (CCN) are aggregated. Three percent of CCNs contain multiple facilities that map to different counties and some of these may also map to different CBSAs. These data are reported daily by more than 6,000 facilities across the country. While these data are reviewed for errors and corrected, some reporting errors may still exist within the data. To minimize errors in data reported here, extreme outliers are removed from the data before the metrics are calculated.
  - Total inpatient bed, ICU bed, and ventilator counts are calculated as an average among reports from each hospital in the given timeframe. Unless otherwise noted, "inpatient beds" indicates staffed adult and pediatric inpatient beds, while "ICU beds" indicates staffed adult ICU beds. Utilization metrics calculate the average utilization in the geography for the week. Due to inconsistent reporting and impacts of staffing on the total number of beds at each hospital, variations may occur over time and the number shown may not be a full representation of the true number of resources in the area.
  - Total number of admissions is calculated as a sum of confirmed and suspected admissions, both adult and pediatric, reported by all hospitals reporting in the given timeframe. Due to inconsistent reporting and data errors, the number shown may not be a full representation of the true number of admissions in the area.

# DATA SOURCES AND METHODS – COLOR THRESHOLDS

## Color Thresholds for Indicators

The green-to-red color thresholds convey information on levels of transmission severity. There are not specific labels associated with each color threshold.

Colors are determined by first rounding a raw number to the nearest integer or tenth, and then selecting the associated color. If there is no data or a metric cannot be computed, a cell is colored gray.

Color thresholds were set based on a variety of factors and analyses, including assessing historical correlations in test positivity and case counts.

Additional shades of red are used for certain visualizations to provide greater context.

**NOTE: Colors are applied after rounding to the displayed digits of precision**

### CASES/DEATHS

Confirmed cases - 7-day total  
Cases per 100k - 7-day total  
Confirmed deaths - 7-day total  
Confirmed deaths per 100k - 7-day total  
Confirmed cases - % change  
Confirmed deaths - % change

DARK GREEN	LIGHT GREEN	YELLOW	ORANGE	LIGHT RED	RED
colored by per capita thresholds					
4 or less	5 – 9	10 – 49	50 – 99	100 – 199	200 or more
colored by per capita thresholds					
not used	0.0	0.1 – 0.9	1.0 – 1.9	2.0 – 4.9	5.0 or more
-26% or less	-25% – -11%	-10% – +0%	+1% – +10%	+11% – +25%	+26% or more

### VIRAL (RT-PCR) LAB TESTING

NAAT positivity rate - 7 day average  
Total NAATs - 7-day total  
NAATs per 100k - 7-day total  
NAAT positivity rate - absolute change  
Total NAATs - percent change

DARK GREEN	LIGHT GREEN	YELLOW	ORANGE	LIGHT RED	RED
2.9% or less	3.0% – 4.9%	5.0% – 7.9%	8.0% – 9.9%	10.0% – 14.9%	15.0% or more
colored by per capita thresholds					
5,000 or more	3,000 – 4,999	2,000 – 2,999	1,000 – 1,999	500 – 999	499 or less
-2.1% or less	-2.0% – -0.6%	-0.5% – +0.0%	+0.1% – +0.5%	+0.6% – +2.0%	+2.1% or more
+26% or more	+25% – +11%	+10% – +1%	+0% – -10%	-11% – -25%	-26% or less

### HOSPITAL UTILIZATION

Confirmed COVID-19 admissions - 7-day total  
Suspected COVID-19 admissions - 7-day total  
Total COVID-19 admissions - 7-day total  
Confirmed COVID-19 admissions per 100 inpatient beds - 7-day total  
Suspected COVID-19 admissions per 100 inpatient beds - 7-day total  
Total COVID-19 admissions per 100 inpatient beds - 7-day total  
% inpatient beds occupied  
% ICU beds occupied  
% ventilators in use  
% inpatient beds occupied by COVID-19 patient  
% ICU beds occupied by COVID-19 patient  
% ventilators in use by COVID-19 patient  
Confirmed COVID-19 admissions per 100 inpatient beds - percent change  
Suspected COVID-19 admissions per 100 inpatient beds - percent change  
% inpatient beds occupied - absolute change  
% inpatient beds occupied by COVID-19 patient - absolute change  
% ICU beds occupied - absolute change  
% ICU beds occupied by COVID-19 patient - absolute change  
% ventilators in use - absolute change  
% ventilators in use by COVID-19 patient - absolute change  
Monoclonal antibody courses administered by hospitals - percent change

DARK GREEN	LIGHT GREEN	YELLOW	ORANGE	LIGHT RED	RED
colored by per 100 bed thresholds					
1.0 or less	1.1 – 3.0	3.1 – 5.0	5.1 – 10.0	10.1 – 15.0	15.1 or more
2.0 or less	2.1 – 5.0	5.1 – 10.0	10.1 – 15.0	15.1 – 20.0	20.1 or more
GRAY 0% – 80%				81% – 90%	91% or more
3% or less	4% – 7%	8% – 12%	13% – 15%	16% – 20%	21% or more
-26% or less	-25% – -11%	-10% – +0%	+1% – +10%	+11% – +25%	+26% or more
-2% or less	-1%	0%	+1%	+2%	+3% or more
100% or more	99% – 20%	19% – 0%	-1% – -19%	-20% – -99%	-100% or less



# DATA SOURCES AND METHODS

## States that have provided no county testing data for the most recent days of reporting:

- All states have provided at least some testing data for the time period in this report.

## States that have provided no state testing data for the most recent days of reporting

- All states have provided at least some testing data for the time period in this report.

## Cases and Deaths

- County-level case and death data are inclusive of all updates as of 11AM 12/27/2021.
- State-level case and death data are inclusive of all updates as of 11AM 12/27/2021.

## County Test Data Source by State

- **CELR data from states provided in line level format:** AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, GU, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MP, MS, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, PR, RI, SC, SD, TN, TX, UT, VA, VI, VT, WA, WI, WV, WY

## State Test Data Source by State

- **CELR data from states provided in line level format:** AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, GU, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MP, MS, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, PR, RI, SC, SD, TN, TX, UT, VA, VI, VT, WA, WI, WV, WY

# DATA SOURCES AND METHODS – AOC CONTINUUM

The **Areas of Concern Continuum** is used to describe communities as they progress through stages of the epidemic. There are 7 possible AOC classifications based on current and recent history of case and testing data for the location:

## Low Burden Community

**Purpose:** Identify communities with minimal activity.

**Definition:**

- <10 new cases per 100k population in the last week

## Moderate Burden Community

**Purpose:** Identify communities with moderate disease activity.

**Definition:**

- Has **NOT** been identified as a Hotspot, Sustained Hotspot, or High Burden—Resolving within the last 2 weeks  
AND
- Does not meet the definition for an Emerging Hotspot, Hotspot, Sustained Hotspot, or High Burden—Resolving  
AND
- Does not meet the definition for being a Low Burden Community

## Emerging Hotspot

**Purpose:** Generate early and reliable signals of communities with emerging increases in disease burden that have a high likelihood for becoming a hotspot in the next 1-7 days.

**Method:**

Decision tree model that leverages the following features, trained based on prior data:

**Cases**

- Total cases in the last week
- Total cases per 100k population in the last week
- New cases in the last week minus new cases the previous week
- Ratio of total cases in last 7 days to total cases in last 30 days

**Testing**

- Number of tests last week
- Difference in percent positive tests in last 7 days from last 21 days

## Hotspot

**Purpose:** Identify communities that have reached a threshold of disease activity considered as being of high burden.

**Definition:**

- >100 new cases per 100k population OR >500 new cases in the past week  
AND
- Number of days in downward case trajectory\*  $\leq 7$  days  
AND
- >50 cases during past week  
AND
- Conditions must hold for at least 3 of the previous 5 days

## Sustained Hotspot

**Purpose:** Identify communities that have had a high sustained case burden and are at potentially higher risk for experiencing healthcare resource limitations.

**Definition:**

- Either Hotspot for at least 7 preceding days or already a Sustained Hotspot on previous day  
AND
- >200 new cases per 100k population OR >1,000 new cases in the past two weeks  
AND
- Daily incidence rate >15 new cases per 100k population for 8 or more of the last 14 days OR test positivity >8% over last 14 days  
AND
- >100 cases during the last two weeks  
AND
- Conditions must hold for at least 3 of the previous 5 days

**Data Sources:** CDC Aggregate County Data; Unified Testing Dataset; US Census 2019

## High Burden - Resolving

**Purpose:** Identify communities that were recently identified as hotspots and are now improving.

**Definition:**

- Identified as a Hotspot or Sustained Hotspot within the last 2 weeks  
AND
- Not currently a Emerging Hotspot, Hotspot, or Sustained Hotspot  
AND
- >100 new cases per 100k population OR >500 new cases in last week  
AND
- Number of days in downward trajectory\*  $\geq 7$   
AND
- >50 cases during last week OR both  $\geq 10$  cases in last week and >8% test positivity in last week

## Moderate Burden - Resolving

**Purpose:** Identify communities that have a moderate level of burden, but are demonstrating improvement.

**Definition:**

- Identified as a Hotspot, Sustained Hotspot, or High Burden—Resolving within the last 2 weeks  
AND
- Does not meet the definition for an Emerging Hotspot, Hotspot, Sustained Hotspot, or High Burden—Resolving  
AND
- Does not meet the definition for being a Low Burden Community

**\*Number of Days in Downward Case Trajectory:** This field is calculated using a CDC algorithm that first fits a smooth spline curve to daily case counts, and then counts the number of days that curve has been decreasing or at a low level. More specifically, the computation is based on a cubic spline fit of the 7-day rolling average of cases. The number of days decreasing (in downward trajectory) is calculated by summing the number of consecutive days of decline or near-zero incidence. A day is considered part of a downward trajectory if it (i) was previously at elevated incidence (had a two-week incidence greater than 10 cases per 100k population), and (ii) meets one of the following three conditions: (a) had a negative slope, OR (b) was in a low-incidence plateau (two-week incidence  $\leq 10$  cases per 100k population and a slope  $\geq 0$  to < 0.1 new cases per 100k population based on a 7-day moving average), OR (c) had less than 5 cases in the past 2 weeks.